

NORTHERN ILLINOIS APPLE USERS GROUP

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THE HARVEST

NOVEMBER 1984

MEETING DATE Dec 8, 1984

10:00 am-1:00 pm Bldng A, Rm 100, Harper College

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Beginners SIG Co-ordinator—	Guy Lyle	312-359-1458
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CORRECTIONS/CHANGES OF ADDRESS

Corrections/changes of address MUST be sent to the club secretary. Mailings are by bulk presorted third class mail. Any incorrect addresses will usually result in missed issues.

Membership is open to all. Dues are \$24.00 annually with a one time initiation fee of \$5.00 at the time of admission. Membership applications are available from the club Secretary at the meetings or by mail.

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60042
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SYSOP-Dave
& Joel Alpert

SUBMITTING ARTICLES

Handwritten articles are acceptable but articles on disk are preferred. Articles on a disk should use one of the following word processors: Easywriter, Appewriter, PIE or Magic Window. Use a 0'left margin and a line length of 47 characters for Easywriter and 41 for all others. Fill and right justify all text. Also supply a hard copy of the article for proof reading purposes. If your article includes a program listing please submit it on disk unless you have a printer that uses carbon film ribbon. All disks will be returned at the meeting unless requested to do otherwise.

MEMBERS AIDE

The members listed below have volunteered to answer questions from club members who need a "HOTLINE" type answer that can be handled over the telephone. Please try to be brief as a courtesy to them. PLEASE NO CALLS at dinner time or after 10 pm.

PLEASE NO CALLS AT OTHER TIME OR AFTER 10 PM.
ADDITIONAL VOLUNTEERS REQUIRED TO FILL OUT THIS MEMBER SERVICE. IF YOU FEEL QUALIFIED IN ONE OF THE
SUBJECTS BELOW PLEASE CALL THE EDITOR TO HAVE YOUR NAME ADDED TO THE LIST.

GENERAL	Paul Stadfeld	312-359-2378	P	*Dave Drucker	312-541-2124
TECH NOTES	Joe Zeinz	312-526-0575	A, I	*daytime	
BULLETIN BOARDS	Joel Alpert	312-295-6078	M, A, I	Rich Lundeen	312-420-8468
COMMUNICATION PACKAGES & MODEMS/TELECOM			M, A, I	Paul Stadfeld	312-359-2378
Apple Cat II	?	?	M, A, I	Guy Lyle	312-359-1458
DC Hayes Micromodem	Joel Alpert	312-295-6078	M, A, I	Joe Zeinz	312-526-0575
	Tony Antonucci	312-282-8436	A, I, P	Earl Allen	312-837-9259
	Rich Lundeen	312-420-8468	A, I	Ken Nestle	312-620-7745
DC Hayes Smartmodem	?	?	A, P, C	Jim Murphy	312-449-3139
ASCII Express	Joel Alpert	312-295-6078	8080, Z80 Assembler	Tony Antonucci	312-282-8436
	Tony Antonucci	312-282-8436	F	Tony Antonucci	312-282-8436
Z-pro	Tony Antonucci	312-282-8436	C	Bob Sullivan	312-383-7785
IBM	Rich McNeil	312-986-0548	A, C, Cobol	?	?
			Fortran	Loren Avenson	312-259-9433
Commodore	Don Strauss		Logo	John Kelley	414-354-7656
			Pilot	?	?
				?	?
HARD DISKS			SPREADSHEETS		
Corvus	*Dave Drucker	312-541-2124	Multiplan	William Neurauder	312-980-4785
	*daytime		Microfinesse	*Dave Drucker	312-541-2124
Corona	Walt Hopkins	815-459-1769	LogiCalc	*daytime number	
	?	?	The Spreadsh/Magi-calc	Peter Clarke	312-545-0974
COMPILERS				Bob Steinberg	312-677-8787
Tasc	Rich McNeil	312-986-0548	Incredible Jack	Joe Sobel	312-398-1826
Expediter	?	?	VisiCalc	?	?
			VisiCalc	Joe Sobel	312-398-1836
				Jay Toutenhoofd	312-359-1460
DATA BASES			OPERATING SYSTEMS		
dBase II	Ron Curtis	312-827-1157	Apple DOS	Jim Glore	312-843-3215
DB Master	Max Rubin	312-674-7209		Tony Antonucci	312-282-8436
	Natalie Alberts	312-381-1530	CPM	Tony Antonucci	312-282-8436
Data Factory	Ken Falter	312-259-6474	UCSD P-System	*Dave Drucker	312-541-2124
General Manager	Rich McNeil	312-986-0548		*daytime number	
Infomaster	?	?	PRINTERS		
List Handler	Carl Johnson	312-256-6094	General	Terry Tufts	312-577-7381
Versaform	?	?	Apple Dot Matrix	David Macaulay	312-991-4977
Visifile	?	?	Diablo	Peter Clarke	312-545-0974
PFS	Byrd Dehinten	312-998-8742	IDS	?	?
	Rich McNeil	312-986-0548	Epson	Tony Antonucci	312-282-8436
EDUCATION SOFTWARE	Jim Bradshaw	312-881-7000	NEC Spinwriter	Beldon Rich	312-272-8236
GAMES		?	NEC 8023	Bob Steinberg	312-677-8787
GRAPHICS	Paul Stadfeld	312-359-2378		Rich Lundeen	312-420-8468
HARDWARE	Jim Murphy	312-449-3139	ProWriter	Tom Grisko	312-297-0927
8" disk Drives	Tony Antonucci	312-282-8436	Okidata	Peter Clarke	312-545-0974
				*Dave Drucker	312-541-2124
				*daytime number	
ACCOUNTING			WORDPROCESSORS		
The Accountant	Walt Hopkins	815-459-1769	Easy Writer	Terry Tufts	312-577-7381
Home Accountant	Tom Grisko	312-297-0927	Apple Writer II	Ken Falter	312-259-6474
Time is Money	Bob Steinberg	312-677-8787		Rich McNeil	312-986-0548
BPI	*Debbie Hauser	312-272-8236	Format II	Bob Steinberg	312-677-8787
			Gutenberg	?	?
*daytime			Letter Perfect	?	?
BEGINNERS AIDE	*Rich Lundeen	312-420-8468	Magic Window	Ed Evenson	312-255-3403
	*Applesoft, DOS, Assembler			Rich Lundeen	312-420-8468
	VisiCalc		ScreenWriter II	Rich McNeil	312-986-0548
INVESTMENT	John Hoffmann	312-998-0164		Tom Grisko	312-27-0927
INVESTMENT	Jim Bradshaw	312-881-7000	Supertext II	?	?
LANGUAGES			Apple Pie/PIE Writer	Walt Hopkins	815-459-1769
(A)pplesoft, (I)nteger, (P)ascal,			Word Handler II	Carl Johnson	312-256-6094
(F)orth, (L)isp, (M)achine code,			WordStar	Peter Clarke	312-545-0974
A, I	Ted Rosemann	312-882-7938			
A, I	Mary Rosemann	312-882-7938	GENERAL BUSINESS	Tony Antonucci	312-282-8436
P	Herb Schulz	312-968-6927	Stats Plus	Ken Falter	312-259-6474

EDITORIAL

by Terry Tufts

ERRORS WHAT ERRORS???? Well we maybe should call this the sack cloth and ashes issue. Last month more errors got by or were created by me to fill a small book. Well we will sharpen the pencil and get the ghost busters on the job and see if we can get some of those Gremlins before they get me.

RUMORS PERSIST

Apple always seems to have a white elephant in its product lines. In an effort to better the venerable Apple II, Jobs and company produced the Apple III. Due to incompetence in the Apple organization it took about a year to work out the manufacturing/design problems. Unfortunately the buying public never ever became believers and what turned out to be a very competent computer eventually was abandoned without reaching its potential.

The same fate seems to be in store for the IBM PC jr, though IBM has upgraded the machine and is spending time and money to dispel the image. Only time will tell whether a corporation as large as IBM can rescue jr's image.

In the mean time Apple created the Lisa, Macintosh. It was a great experiment in producing integrated software that would handle most of the tasks required of the average personal work station. But it too developed a bad public image. The software developers soon realized that an \$10,000 dollar computer was not going to set the market on its ear. The result has been lackluster sales and the software developers flocked to its support by the ones. In spite of price drops and making the software from Macintosh runnable on the Lisa we continue to hear that the Lisa will be cancelled early in 1985.

At the same time we hear about the Fat Mac in the hands of software developers. The specs go something like this: 68010 microprocessor (more features than the 68000 chip), 12 inch color screen, 512 Kbytes of memory and a Unix operating system. Maybe a Lisa reborn????

WAIT HOLD THE PRESSES.....

We now hear that the Lisa name will be allowed to die. But the machine or near relatives will continue as part of the Macintosh line.....stay tuned for more exciting episodes.

APPLE IIe TOO SUCCESSFUL?????

Apple was hoping that its newer IIc would take over the market from the IIe. It costs much less to build and the profits/machine are higher. The public is refusing to co-operate and the IIe is still the more popular machine. Apple has countered by dropping the special price offered on the IIe in hope of biasing its sales towards the IIc.

So much for Apple's marketing acumen. They refused to make significant changes to the Apple II since its inception. First they were protecting the Apple III from their own incompetence. Then the Lisa bombed. All the while the II was paying the bills. Finally the II became a IIe. A very modest improvement to say the least. It costs less to produce but does very little more than the II. It still has the same inadequate single sided disk drives, has no good way of using more than 64K of Main memory, has the same speed central processor that it began with and only in the last year has it officially been supported by Apple with a hard disk drive that is inadequate by present standards and no good way to back it up, except with innumerable floppy disks. Still it selllllllllllls.

Now we hear some good news. The other Steve (Woz) who makes no claims to marketing insights, says he has a 16 bit Apple II like machine running in his lab. He says no product will appear before 1986, and its features have not been defined as a real product. When it is defined he will not be able to talk about it.

Lets hope IBM hasn't captured all the market before then.

In the mean time lets hope the add in cards for the II using the 16 bit 6502, designated 65SC816 (see separate article), will fill the void that Apple Inc. appears to be oblivious to.

WHAT'S FOR CHRISTMAS????????

Christmas traditionally is the best time of the year for computer dealers. (35 % of the

computers are sold in the 4 th quarter). It is the time that all kinds of specials are also offered. Individual dealers also add their discounts to what the manufacturers offer.

IBM- IBM has come up with a system of rebates to its dealers instead of a price reduction. It requires the dealers sell a certain volume of systems. The rebates will then be \$350 for the PC XT, \$100 for the PC and Portable PC. Possibly the best dollar value will be the PC jr.(it is expected to give the Apple IIe and c the best run for the money) IBM is pulling out all the stops. Dealers will receive a \$250 dollar/machine sold with a color monitor. It takes 80 machines to qualify. Unsold machines can be returned for a 5% restocking fee.

APPLE- Apple has come up with a Test Drive the Mac program. Under this plan persons 18 yrs and older can borrow a Mac for 24 hours. The dealers are being offered a sales incentive program that requires them to sell 20 Macs between Nov 1 and Jan 31, 1985. They will then have an entry, for each 20 Macs sold, in a a sweepstake where each regional winner will get the use of a leased Porsche for one year. (I hope it doesn't have an Apple decal on the side). Other smaller prizes will also be awarded.

The IIe and IIc will be sold with \$300 dollars worth of cash rebate coupons, the same promotion that they used last year.

PREZ SEZ

by Rob Stewart

We now have a full Board of Directors. Check the masthead for a list of current directors. Bill Noonan has volunteered to coordinate the 'buyers sig'. Anyone interested in obtaining products at reduced prices, contact Bill. Also, listed in the HARVEST is a table of local computer stores which have volunteered to give NIAUG members discounts on products purchased in their stores. Check the table for details and discounts. Please support these stores, as they are supporting us. Any stores wishing to be added to this list, contact Terry Tufts.

By now, you will probably have been contacted by the NIAUG NOTIFIER. This is a tele-marketing system owned by Jim

Glore. NIAUG has contracted with Jim to contact the membership with notifications. Later there will be a survey. We hope to obtain better input regarding the opinions of the membership with this system. This is a trial, and we will be evaluating the results in the coming months. Cost of using the NIAUG NOTIFIER is less than the cost of postcards used in the past.

You will have noticed several changes in the HARVEST. Several more are being discussed. Any input is welcome. Any help is MORE WELCOME.

Now for some Apple info/rumors. This following information will fill in some gaps in my 'To E or not][e' article. Come back and re-read what follows after you read that article.

Apple (rumor has it) has a number of new products in the wings. Mostly MAC accessories. There is a LaserPrinter to be released next year for the MAC. One rumor says \$7000, another says LOWER than \$3000.

The latest version of PRODOS is available, and fixes the drive speed sensitivity problems. Free upgrades? Maybe.

Apple is looking into other processors, bigger disk drives, hard drives, etc for the][family. On this same subject, the][X product group was disbanded back in March of 84. The X engineering group is still working, but the people that would get the product to the market, aren't there anymore. This means 1986 before the][X could be a product.

What is the][X you ask? The][X was supposed to be the next version of the][product family. It would use a 16 bit processor (68000, or maybe the 65SC816), with lots more memory. I would hope more disk space.

The "FAT][e" rumor was denied emphatically by an Apple Sales Support Analyst.

When I say Apple killed the ///; they continue to build machines, they have just stopped any development of enhancements to the product, either

hardware or software.

It seems like Apple is still trying to 'cut their own throat'.

Well, that's it for rumors. Anyone else with other, more or different information, please drop Terry a note with details. We all are interested in what is happening.

Rob Stewart, CDP
President, NIAUG

DISCOUNT DEALERS

The following stores have offered discounts to NIAUG members. You "must" show your NIAUG membership card to get the discount.

SOFTWARE & BEYOND
formerly

SOFTWAIRE CENTER INTERNATIONAL
Woodfield Commons
1222 E. Golf Rd
Schaumburg, IL 60195
312-882-3733

Discount is 23% but you MUST speak with Holly Chaffin. Hrs Mon-Wed, Fri 9-6, Thur 9-8, Sat 10-5, Sun 12-4.

COMPUTERLAND OF ARLINGTON HEIGHTS

270 W Rand Rd
Arlington Heights, IL 60004
312-870-7500

Discount is 10%, talk to any one on staff.

COMPUTER OUTPOST

520 Wise Road
Schaumburg, IL
Discount is 10% except on day of NIAUG general meeting when it is 15%.

SOFTWAIRE CENTRE

8219 Golf Rd
Niles, IL
312-965-9044
Discount is 10% on merchandise under \$100, 15% over \$100.

COMMENT

by Rob Stewart

I was pleased to hear from Terry Tufts that we had received a "Letter to the Editor" for publication in the Harvest. This is the kind of concern that I like to see from our membership! I would like to thank Brian Lendzion for taking the time to "let us know" how he feels. The group needs this kind of dialogue, and we are proud to have Brian as a member.

Brian's letter appears in this HARVEST, exactly as it was received. A little background is in order, before I answer his comments.

The "snake oil salesman" Brian refers to is none other than Bill Sefton along with his partner Ken Booster. Bill and Ken are principals in a company which makes and markets Tele-marketing equipment. Bill is not new to NIAUG, he joined back when the name was NSAUG. He is also author of 2 very good utility programs for Apple II computers, "The Inspector" and "Watson". Many of you 'old timers' will remember Bill from his numerous talks for the group as well as his "Disk Repair Clinic" with Mark Pump. Bill was given less than 5 minutes to tell people about how he got started in with Apple computers, and to ask anyone interested in "making money" with their Apple to stay after the meeting to listen and talk with him about a business idea he was marketing.

As I read Brian's letter, he was interested in the idea to "make money" with his computer, enough to stay after the meeting to listen to Bill. He is upset about the method used to make the money, not the money being made. The group WILL be testing this system to notify members of meetings, both General and SIG. Personally, there is no tape recorded voice which will be able to talk me into anything! I also find it easier to hang up on a machine than to hang up on a person.

The idea of this equipment is to transfer information. You transfer your interest in a product or service described by a recorded voice, and a PERSON calls you

the ones who "talk you into buying". The alternative method, is when the machine calls you to tell you about an opportunity. Such as an un-announced sale at a local store, dinner at half price tonight only if you use a "code word" when you order, the MAC SIG meeting location has been changed, or 'bring your postcard to the next meeting for the door prize entry.'

"JUNK" is in the eye (or ear) of the beholder. I have no interest in many of the telephone sales calls that each of us get each month. If I did not want to receive these calls I have several alternatives. The 'hardnosed' answer is rip out the phone, but few will be interested in this approach. Put an answering machine on the phone. Sales people do NOT talk to machines, they will just hang up. It might be funny to listen to 2 machines try to communicate. The other alternative is to buy a call interceptor which shields you against calls from people without knowledge to access your phone. These are only some of the possible alternatives, there may be others of which I am unaware. My problem is that every so often I get a sales call that interests me! My own personal decision has been to continue to receive all these calls, knowing full well that some will come when I am sleeping, or in the shower. I don't yet have an Apple program which will screen my phone calls. Someone will write one, but the hardware is too expensive today. Maybe in a few years.

How would you make "junk" calls illegal. Your "junk" may be "gold" to me. Would you force into un-employment all those people who now make telephone sales calls, and all the companies that sell their products and services in this manner. What about all the charities that make telephone solicitations both for money and donations of clothing? Or are you saying that they are only "junk" if "made by machine"? If it is A PERSON calling to sell you, THEN IT'S OK if I was sleeping, you woke the baby, or my

grand-father broke his leg trying to get to the phone? This can not be a question of legal or illegal. Responsibility must fall on the individual to make his own decision and PROVIDE HIS OWN PROTECTION.

I object to the term "jerk" being used in reference to ANY NIAUG MEMBER. I didn't see any arms twisted. Unethical? Not in my opinion. Annoying? Could be; I get annoyed at these people/machines sometimes. Stupid? The "free enterprise" system has a very effective way of eliminating stupid ideas and products. They don't make any money, and go broke! I, as president of NIAUG, knew exactly what Bill was going to talk about. He got my approval BEFORE he was introduced at the meeting. His 'pitch' was the same. Brian, if you noticed, several of the officers were there after the meeting, listening along with you.

The stated purpose of NIAUG is "to serve the best interests of the membership, to assist in distribution of information as it pertains to computers, and to provide the support structure for educating the membership with regard to computers." This is a quote from the BYLAWS; see the July-84 HARVEST. I interpret this to mean the 'transfer of information' to members of anything of interest. I am not going to censor any of this information, just pass it on to the members as is. You make your own decisions! This is freedom.

NIAUG neither supports nor condemns this product/service. It was presented in the interest of 'information transfer' to the membership. If the membership feels that this is contrary to the stated purposes of the group, then I have been mistaken in my interpretation, and the BYLAWS need to be clarified. At this point I NEED TO KNOW just what you, the members of NIAUG, feel about this subject. Please take the time to write a note to the editor.

Rob Stewart, CDP
President, NIAUG

LETTER TO EDITOR

October 16, 1984

Dear Fellow NIAUG Members,

I am proud to be a member of NIAUG. I have a tremendous appreciation and respect for the caliber of the people I have met at NIAUG meetings. This is why I was so angered by something that occurred at the September meeting.

There was a man encouraging NIAUG members to "make money" with their computers. Not a bad idea. It was what he wanted them to do with their computers that infuriated me. This "snake oil salesman" wanted NIAUG members to connect their computers to a machine that makes automatic telephone calls. The purpose of these telephone calls could be as legitimate as a club reminding its members to come to a meeting, or a mail order house informing customers that their orders were ready to be picked up. But the "big money" was in calling people at random and having the tape recorded voice try to talk the person who answers into buying a certain insurance policy, changing their brands of toothpaste, or taking their next roll of exposed film to a different processor.

I get junk mail, and so does everyone who is on a mailing list, but junk mail does not harm anyone. However, junk telephone calls are a violation of an individual's right to peace and quiet. You will more clearly understand what I mean when you experience these "money making opportunity" phone calls first hand. Have you ever received one of these calls while you are taking a shower? Or when you work the midnight shift and are sleeping days? Or when you have a sleeping baby? How about senior citizens needlessly rushing, risking life and limb, to answer a call made by a robot that is trying to sell them life insurance they are ineligible to buy.

These junk telephone calls should and will be illegal. If the use of these machines increases and we all start getting 10, 20, maybe 100 of these calls every day, they will definitely be outlawed.

This activity is a misuse of two of the finest inventions of this century, the telephone and the computer. The users of these junk telephone calling machines will give all computer enthusiasts a black eye just as the database invaders did by breaking into large computer databases, browsing and damaging the data. Now the unthinking computer users will be breaking into castles via the telephone and destroying the peace and quiet within.

I was saddened to see this jerk given any time at a NIAUG meeting to lure NIAUG members into this unethical, annoying, and stupid activity, but I suspect that the content of the pitch given to the NIAUG Officers by this jerk was NOT the same as the one he gave to the members.

Brian Lendzion

Brian Lendzion

BOOK REVIEWS

Presenting the Macintosh

by

Merl K. Miller and Mary A. Myers

PUBLISHER: dilithium Press
8265 S. W. Nimbus
Suite 151
Beaverton, Oregon 97005

PRICE: \$ 5.95

Review by Patt Chase ©

Well, it seems as if 'cutesy' is in; or rather 'folksy'. As used to as I am reading more technically oriented journals, I found **PRESENTING THE MACINTOSH™** to be fun reading. Somewhat talkative, but enjoyable reading nonetheless.

Miller and Myers have written an overall view of **MAC** and present the book as an introduction to the "new technology that has changed the computer industry". Who can argue with that logic? Chapter by chapter they walk a relative newcomer thru **MAC**.

Chapters 1 (Hello Mac) and 2 (Desk Accessories) describe what **MAC** can and cannot do as well as present the Notepad, etc. in common, everyday, layman's language. Chapter 3, entitled A Window on the World, explains just that...windows, along with menus. Chapter 4 gives us an overview of word processing and unless you are a rank beginner, the authors advise you to skip this chapter. Go ahead and skip it!

I had waited until my **MAC** came to really feel confident enough to complete the review of **PRESENTING THE MACINTOSH™**. I'm glad I did. Just reading isn't enough. Now time to play...

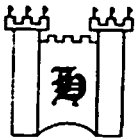
The MacWrite chapter introduces the reader to 'learning overhead', (a cute phrase coined to suggest the time required to learn the object lesson); formatting, font and style menus. A very novel 'novel' is presented: "THE BIG RIP OFF"; a take-off on Sherlock Holmes, using all the various fonts in MacWrite. Informative, but cute. However, their explanation of 'special editing features' was very helpful. (Most of us are used to the II+ or IIE and Applewriter. Not imbedding commands will take some getting used to.

As one would expect, following the MacWrite Chapter is the chapter on MacPaint. A very detailed explanation of each tool displayed and the patterns on the screen is given and the screens illustrated show some fun things to do.

Chapter 7, entitled MacFuture, is a brief synopsis of the authors thoughts on available software and the future of software for the **MAC**. Some specific software is mentioned, i.e. PFS:File, Microsoft Word, Think Tank, Multiplan, MacDraw, etc. with a short paragraph on each. In addition, there are short paragraphs on communications software, programming languages, magazines, books and last but not least, hardware.

Just before the index at the close of the book, is the expected glossary of Computer terms. No book would be complete without it or would it..... In conclusion let me say that this is a good book for a 'novice' who is unfamiliar with the world of Apple Computers but for those established in the apple orchard, don't bother to bite..

SOFTWARE REVIEWS



HELSINGOR, INC.

1402 LAMA LANE PH. 312-635-7837
MT. PROSPECT, ILL. 60056

5 1/4" SSDD VERBATIM DISKETTES

Bulk Packaged with Sleeves

10/\$21 100/\$200

DATALIFE in Soft Box

10/\$22.50 100/\$215

DATALIFE in Plastic Box

10/\$23.50 100/\$225

PLEASE INCLUDE

\$2 shipping/10

\$6 shipping/100

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Last month I reviewed the "DISK DRIVE ANALYZER" and one of my major complaints was a lack of documentation and a discussion of the actual test methods. By chance, while reading one of the many magazines that I receive, I came across this article written by the designer of the "DISK DRIVE ANALYZER." The package would have been better had this information been included by the manufacturer.

I would like to thank the Editor of Computer Technology Review, Dan Reese, for taking the time to send me a letter giving me permission to reprint this article.

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System-Level Disk Drive Tests Can Be Performed Efficiently by the User

Advances in technology have made it possible to perform extensive drive diagnostics and testing at the level of the host system without special hardware.

by C. Bond,
Data Encore Inc.

The remarkable growth of the personal computer industry has increased the demand for the rapid testing of computers and peripherals. This need is particularly apparent with mechanical devices, such as flexible disk drives, because they require periodic maintenance or adjustment.

Disk drives typically undergo performance testing under one or more of the following conditions:

- During initial assembly.
- At final test.
- At a quality control station.
- At receiving inspection.
- During system integration.
- During checkout at retailer's site.
- At the end user's installation.
- At a repair center.

The tests performed in each of these situations will differ. For example, at a factory or repair center it's possible to provide special equipment to measure drive parameters accurately. On the other hand, system users usually don't have access to specialized equipment of that kind. Since users have no way to assess the performance of their drives, they must rely on repair centers for diagnostic data, as well as for repairs.

A typical end user who suspects that one of his disk drives is in need of repair must remove the drive from his system and take it to a repair center for checkout and possible correc-

tive action. This process may leave him without a system for several days or weeks. Not surprisingly, the increasing workload on repair centers often results in backlogs that aggravate the downtime problem.

Fortunately, recent improvements in system-level diagnostic techniques have culminated in the appearance of several disk-based products that can assess drive problems quickly, accurately, and easily. These devices are invaluable tools for users who simply want to check out their drives before using them, or who want to verify the drives when there is evidence of some system problem.

WHAT TO TEST

In disk drive testing, the parameters of greatest concern are those associated with the mechanical adjustments of the drive. These include RPM, radial alignment, eccentricity, track zero sensor position, index timing, and head azimuth. Note that this list does not cover all possible drive failure mechanisms. It only cites some of those that can be identified and corrected by adjustments. Component failures are a separate diagnostic problem and are not dealt with here.

Note also that the head azimuth is fixed at the time the head is mounted in the head assembly. This parameter clearly needs to be tested at some point after the drive is assembled, but the need for subsequent testing is debatable. Catastrophic events, such as the drive being dropped, may alter the azimuth, but normal use doesn't materially affect it.

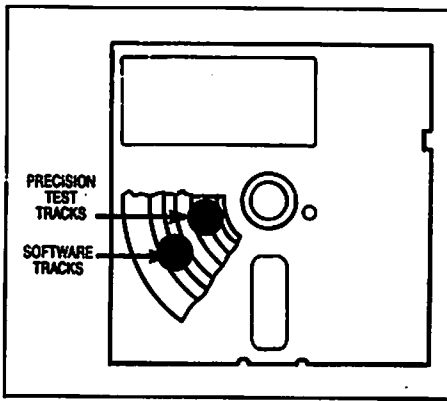


Fig 1 Test tracks can be included on the same disk with software tracks.

For the parameters just indicated, the standard test station requires an alignment disk, special lab equipment, and a trained test technician. The equipment used includes a dual-trace oscilloscope, a disk exerciser, an assortment of hand tools, and a tachometer or equivalent.

To conduct the tests, you remove the cover from the drive so that the electronics board and adjustment points are accessible. Then the exerciser, which may be quite elaborate, is connected to the drive in place of the host system. It is used to move the drive's head positioner to any desired track and may provide some system-like functions.

After setup, the measurements are taken and repairs or adjustments are made as indicated. If none are required, the test equipment is removed and the drive cover is replaced.

Clearly, the test and repair functions are so tightly interwoven that the need only to test still implies the need for all the trappings of a repair center—an enormous waste when no repairs are actually needed.

SYSTEM-LEVEL DIAGNOSTICS AND TESTING

System-level diagnostics are test methods that can be applied to a drive that's still connected to its host system. No removal or disassembly of the drive is required, and no special test equipment is needed to conduct the tests. Unless the drive is in need of adjustments or repairs, no downtime results. Recent products that perform this service make use of the host computer to handle track access, performance analysis, and result

reporting. Thus, even the least technically inclined end users can run the tests and interpret the results.

The tests are performed by margin testing the drive with a special disk that has, in its most compact form, a set of precision test tracks and a set of software tracks. The test tracks provide a source of marginal signals in the systems' disk format (Fig 1). The software controls access to these tracks and performs computations that indicate the drive status.

It isn't possible to test every conceivable drive characteristic from the host system. However, the set of testable parameters easily includes those most commonly associated with occasional adjustments. Further, since the drive performance is evaluated under actual operating conditions, the results are potentially more relevant than those obtained by other methods.

It's critically important for any disk drive to exhibit correct radial alignment and disk centering. The ability to interchange disks between systems is adversely affected by the slightest alignment and clamping errors. For example, a common complaint of drive owners is that disks recorded on one drive do not read back on another. Another is that disks recorded some time ago are no longer readable on the drive that produced them. These complaints are often the result of severe misalignment or misclamping problems, which can occur gradually over a period of time. A means of detecting these errors before they become serious can help to anticipate data-recovery failures before they occur.

Two important disk drive mechanisms that can be tested at the sys-

tem level are the head positioning assembly and the hub clamp. Consider a single, isolated, recorded track on an otherwise blank disk, and suppose that a read head is positioned on the disk near the track. If you plot the head output amplitude vs lateral displacement of the head with respect to the track, the resulting plot will be symmetrical about the zero-displacement ordinate (Fig 2). This symmetry has useful properties that can be exploited at the system level.

For example, you can clearly find a displacement at which machine-readable signals become only marginally readable. This data-recovery threshold will be represented by the two points on the plot that have equal displacements in either direction. The point equidistant between these two is the track center for the drive under test.

If precision tracks are prerecorded at varying displacements from the ANSI-specified track centers, it would be a reasonably simple matter to characterize a tested drive's radial alignment by determining which tracks are readable and which are not. The requirements for these test tracks are:

- The tracks must be recorded in machine-readable format.
- The track centers must be closely controlled or known to a high degree of accuracy.
- Track displacements must cover an adequate range.
- The recording device must have an accurate clamping mechanism.
- Media characteristics must be closely controlled.

The software has the burden of accessing the test tracks and, by computation or table lookup, determining which tracks represent equivalent lateral displacements. If you know the actual centers of these tracks you can determine the extent of a positioning inaccuracy in the drive under test.

The accuracy of the test depends on the granularity of the available displacements, much as the accuracy of a ruled measure depends on the number of scribe lines per unit length. The reason to dedicate a full track to each displacement is that full track reads allow you to compensate for inputs that interfere with the test software. For example, variations in media thickness could produce amplitude modulation that causes local reduction of the signal amplitude. This

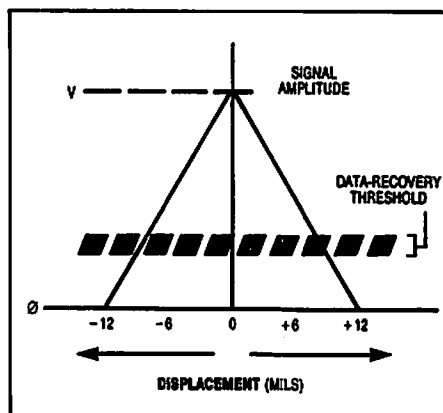


Fig 2 The head output amplitude is symmetrical when plotted against lateral displacement of the head with respect to the track.

potential problem can be minimized if you average the recoverable data over a full track.

The effects of incorrect centering by the hub clamping mechanism can be detected and eliminated entirely by full-track reads. Centering errors cause the prerecorded tracks to move with respect to the read head and this movement exhibits a once- or twice-around periodicity that is independent of the radial alignment. In any case, as long as full track reads are employed, the presence of clamping errors doesn't interfere with the ability to locate tracks with equivalent displacements.

The actual extent of the centering error due to clamping problems can be determined by noting the readable and unreadable areas on marginal tracks. The pattern of unreadable areas can be mapped in software and compared with similar reads in other marginal tracks. The result of this comparison readily yields information on the magnitude of any eccentricity. Soft errors due to transient events can be filtered in software so that they don't degrade the test results.

The accompanying chart (Fig 3) illustrates the result of a typical case. Cells in the diagram indicate sectors. A ONE entry represents a readable sector; a ZERO indicates an unreadable or marginal sector. Because of the nature of the test, only the upper and lower bounds of the eccentricity can be established, but that's enough to allow you to estimate the displacement that's due to clamping errors. This displacement, in turn, can be converted to a more conventional modulation percentage. Again, the accuracy of hub-clamp testing depends on the range of available track displacements.

Fortunately, measurements intended to reveal centering problems are unaffected by radial alignment problems. On the other hand, modulation caused by the media itself can interfere with the test. Thus, very low modulation media is essential to the accuracy of the test.

MEDIA REQUIREMENTS

System-level tests, such as those indicated above, are practical, accurate, and simple to conduct. Nevertheless, the methodology suffers unless the base media is of the highest quality. For the kinds of analyses indicated here, the media must meet the following requirements:

- Lowest possible amplitude modulation.
- Precision-punched center hole.
- High durability.
- No dropouts.

The equipment used to prerecord the special tracks must also be closely controlled. In particular, you must ensure that the disks are accurately clamped at the time of manufacture. Errors introduced at this point can completely invalidate the resulting disk.

ALIGNMENT DISKS VS DIAGNOSTICS

The primary purpose of diagnostic testing is to report the existence of problems, not to correct them. One promise of system-level diagnostics is to make possible the separation of faulty drives from those that function properly, so that unnecessary downtime is reduced or eliminated.

Alignment disks provide a convenient way to calibrate faulty drives and restore them to proper function. That role cannot be adequately filled by current system-level diagnostics. The two devices hold a complementary relationship to each other and should not be seen as interchangeable.

Another useful contrast is the difference between margin testing and conventional equipment calibration.

Calibration refers to an adjustment activity in which the object is to bring some device into conformance with an accepted measurement standard. Examples include the adjustment of scales, voltmeters, and oscilloscopes. For such devices, acceptable performance is defined in terms of the standard.

But for certain devices, especially complex electronic systems, the "platinum bar" type of calibration has limited application. The performance of these systems is often judged by their ability to process data without error. For these systems, margin testing has earned a well deserved place.

Instead of measuring individual system building blocks, margin testing allows you to test the system as a whole while marginal conditions are induced. The purpose of this type of testing is to determine the conditions that maximize the margins of the system. This approach deals directly with the critical areas of performance as they appear to the user.

The previous discussion was aimed primarily at end users of computing equipment that incorporates flexible disk drives. Nevertheless, there are other equally attractive uses for system-level disk diagnostics: at final test (after assembly), at system integration, during checkout at dealer's premises, and for field testing. With further advances in the methodology, expanded test capabilities and increasing market acceptance can be expected. ■

Charles Bond, senior staff engineer at Data Encore, a software duplication company and a subsidiary of Verbatim, developed the Disk Drive Analyzer—a diagnostic tool marketed by Verbatim.

DISPLACEMENT (MILS)	SECTOR NUMBER							
	1	2	3	4	5	6	7	8
D - 0.5	1	1	1	1	1	1	1	1
D + 0.0	0	1	1	1	0	1	1	1
D + 0.5	0	0	1	0	0	0	1	0
D + 1.0	0	0	0	0	0	0	0	0

Fig 3 This map shows the readable sectors for a typical misclamped disk. Note: D = displacement to the normal read-recovery threshold.

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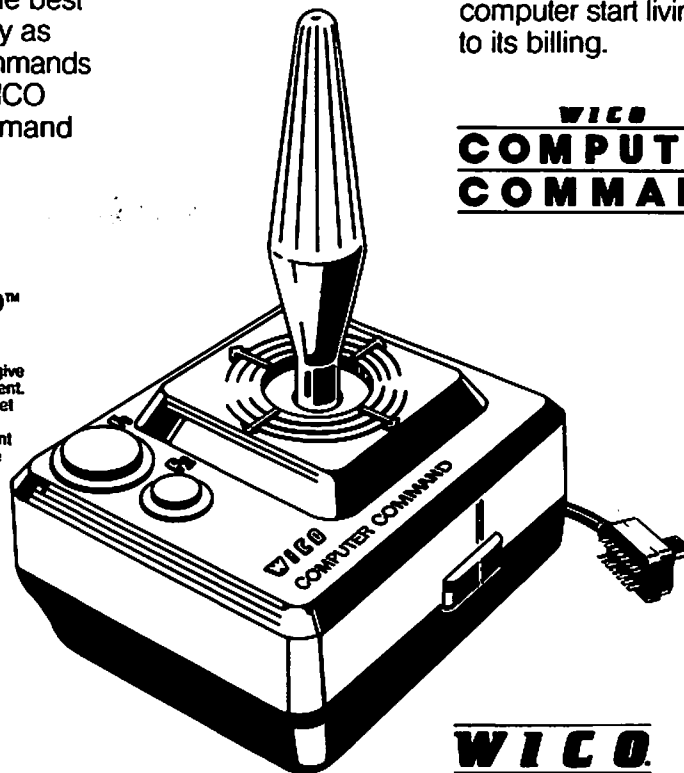
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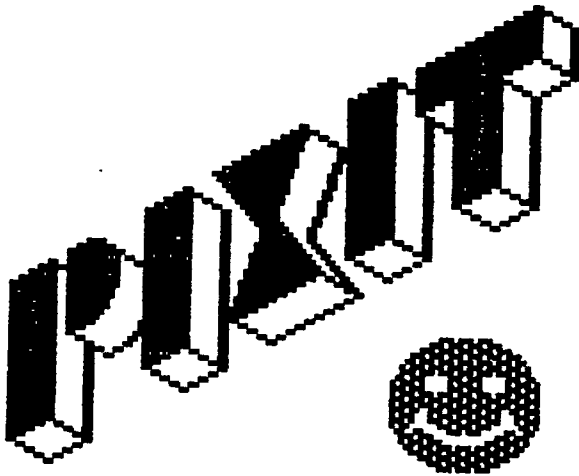
Model #50-1030 Apple® II, IIe, II Plus, Franklin Ace 1000, 1200

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WHAT IS IT??

Reviewed by
J Zeinz and R Herman

PIXIT is a graphics processor written by Michael Darooge. What is a graphics processor, you may ask? Very simple, it allows you to create shapes, such as animals, trees, cars, and then be able to manipulate them in your very own programs. These shapes are made up of a series of what are known as vector moves, which is a whole other article by itself. Shape Tables on the other hand can be a collection of one or more shapes.

This package not only handles shape tables, it is a full scale Hi-res picture editor. Allowing you to create your very own computer artwork. PIXIT comes complete with a disk of easy to use programs, predefined shape tables, several character fonts, and is documented with a step by step instruction book. The programs contained on the disk are:

Picture Editor

Shape Creator Program

Shape Table Editor

Demonstration Program

The picture editor allows you to draw Hi-res pictures of any combination of freehand graphics, various sizes of written text, along with multiple predefined shapes. The editor does support items such as the Koala Pad(tm), joysticks, trackballs, etc. that are connected to the game controller port, to do freehand drawing of lines. Pixit also, handles the standard Hi-Res functions, like the drawing of lines and circles, including fill routines. It has the capability to move graphic symbols any where you chose on the screen. Coloring can be done with up to 24 colors and patterns. When placing a shape on the screen it can be rotated and scaled to desired size.

The graphic processor has the facilities to create your Hi-res shapes with simple keyboard strokes. If you don't want to create your very own shapes you can use or even modify any of the supplied shape table on the system disk. It does take a little practice and patience, when it comes to drawing a given shape. But, with time and gradual understanding of how Apple draws these shapes, one will realize the benefit of such a program.

With the shape table editor program, it allows you to assemble your very own shape tables. These tables can be made up of one or more predefined shapes, from one or more different shape tables. Up to 128 shapes can be placed in any one table. This is nice when the program you are working on uses shapes that originally come from different tables. They can all be combined into one table which can save time and memory space.

The graphics system comes complete with a 38 page instruction book, that is easily understood and followed. It contains a concise tutorial, which briefly discusses the Apple Hi-Res screen. What is nice when running the system programs, Help screens are available just by pressing the '?' key.

Program examples are included on the disk to show you how to incorporate shape tables into your programs.

PIXIT comes on a non-standard fast loading boot program, which cause most disk copy programs to produce non-functional copies. But instructions are supplied to make a working copy. Also the PIXIT programs are written in Applesoft, which allows the more creative programmer to modify them to suit their own needs.

Pixit takes the grunt work out of Hi-res graphics. Simple drawing capabilities combined with quick organizational faculties make graphic programming a breeze. The user need not have to have a vast graphics knowledge. If you do plan to create complex shapes, a certain amount of shape table knowledge is still needed to draw effective objects. It is not something you want to do off the top of your head, planning ahead of time on paper is still helpful. But on the whole, with the shape tables that you are able to create, with this package, you can spice up any of your programming efforts.

Pixit is distributed by Baudville and retails for \$39.95. Additional shape tables and character fonts are also available.

(Title graphics was done using PIXIT.)

LEGAL CARE FOR YOUR SOFTWARE a book review by Terry Tufts

Legal Care for Your Software
by Daniel Remer
Published by-Nolo Press
Price- \$24.95

I have been asked in the past if I have any information on software contracts etc. for the person who is going to market a program they have written. Well have I got good news for you.

Legal Care for Your Software is written for you. It also written for any one in the business of software publishing of any kind.

The author takes a very unique point of view. He introduces you to a subject, gives you background information, in non layman terms, and gradually covers the subject in enough depth to satisfy all but the most complicated situation.

Every question that I have had about contracts on software have been covered.

If you are inclined to do it yourself rather than relying on costly experts then you will be very happy with this book. If you're cautious you will devour this information, select the contracts and clauses that fit your requirements and then run them by your lawyer. Its bound to be much less expensive and if

your lucky you won't be teaching him/her a specialized area of law that many will not normally be familiar.

WHAT IS COVERED

The book is extremely complete. It first discusses TRADE-SECRET protection. He starts by explaining what it is, then how to establish it, the pros and cons of trade-secret protection. Potential problems and how publishers should use trade secret protection.

Of special importance in this section is Nondisclosure agreements for various situations. He gives samples of agreements for a wide range of situations. At the end of this section the average person will have enough information to select an applicable agreement. All they have to do is fill in the blanks. I'm sure that a lawyer may object and say that its not that simple and it would be foolish to rely on do-it yourself advice for a such complicated subject. That is likely true, but you will save considerable money by selecting the agreement that you think suits your situation then having your lawyer review it.

COPYRIGHTS- here we are given a background on copyright protection, what it covers, what can be copyrighted and how to establish copyright protection. Here you are shown how to fill in the Copyright Application. He gives you an ASSIGNMENT OF COPYRIGHT agreement when it comes time to sell your rights to a publisher. He discusses common copyright mistakes and methods to remedy some of them at a later date.

CONTRACTS- this section is covered very thoroughly. All phases of contracts are covered. The reason for each section is explained and what each section means. He follows with contracts for WORK-FOR-HIRE, WORK-FOR-HIRE CONTRACTS FOR STAFF PROGRAMMERS, HIRING DOCUMENTATION WRITERS and ends with outright ASSIGNMENTS OF COPYRIGHT and NONDISCLOSURE AGREEMENTS.

EVALUATION and BETA TEST AGREEMENTS, are covered along with forms for EVALUATION OF SOFTWARE AND SOFTWARE REPORTS.

SOFTWARE LICENSES occupy a major portion of the book. He outlines a typical license agreement and then goes into detail covering every section of the license. He explains the effect and meaning of each clause and offers alternate wording to cover many differing situations. When you have finished this section you will have a contract form that suits your needs to cover a software license.

TRADEMARKS, PATENTS, DISCLAIMERS round out the text that covers contracts and then the author covers COMMON LEGAL PROBLEMS, some INTERNATIONAL SOFTWARE LAW and ends with an appendix that consist of blank contracts, agreements etc that you can run off on your copier.

SUMMARY

This is an easily read but thorough book that is highly recommended to anyone in the software business, either as a publisher or a developer

THE BRAIN SURGEON

An Apple Diagnostic Program

G.G.Conte

Nikrom Technical Products
25 Prospect Street
Leominster, MA 01453

Price: \$49.95

Language: 6502/Applesoft

Dos 3.3 and Dos 3.2

Copy Protection : Locked

Reviewed by: Gennaro G. Conte

The Brain Surgeon is a collection of diagnostic programs used to detect problems associated with the Apple II, II+ computer hardware. It is considered by most advanced Apple users a standard to run a diagnostic test whenever the Apple runs into a problem (eg. disk I/O, etc.) This package provides the basics for such diagnostic testing. Your local Apple dealer should have a complete set of test disks which Apple has provided. You should see him/her if you have problems.

The Diagnostics

The package consists of a disk and one manual. The manual provides the bare essentials to running the package, with no information given on the inner workings of the package. The package consists of the following programs: Motherboard ROM test for both the Apple II as well as II Plus, Applesoft ROM card, Integer ROM card, DC Hayes Micro-modem II test, Monitor, RAM test and the most useful diagnostic out of this package; is the disk drive calibrator test.

The Details

The tests the Motherboard, Integer board and Applesoft board, but it only tests the ROM sections of these boards and not the associated circuits, which can be a problem. The DC Hayes Micro-modem II test is a bit better as it tests both the RS-232C as well as the EPROMS. The video monitor tests are useful, for if you are using a color TV set it helps monitor electrical noise. If you are using a monochromatic monitor you do not need this test.

The RAM test only tests the 48K Motherboard RAM chips. If you want to test your 16k RAM board or one of the other RAM boards (eg. Saturn Systems, Mountain Hardware etc.) you are out of luck with this package.

The most useful part of this test package, for the average user, is the

disk speed calibrator test. This test allows a user to adjust the speed of his/her disk drives. The need to adjust one's disk drive speed comes with time, wear and tear, etc. Your disk drive speed changes as a result of use and it can result in problems. For example, disk I/O errors, blown disks, "File not found" error messages, etc. happen when the disk speed has changed to the point where it can no longer read or write a sector on a disk.

Under heavy use (about 18 hours a day) the disk drive speed calibration in most cases will have to be done about once every 6 months in order to maintain disk drive reliability. You should check on the disk drive speed on an average of once a month in order to keep track of the disk drives' condition and reliability.

The manual comes with instructions on how to adjust the disk drive speed based on the program's output. The program generates a scale across the screen: the scale is based on -100 to +100, with perfect being 0. Ideally +4 to -4 are considered to be reasonable good condition drives. Below -10 or above +10 you must adjust drive speed. This is done by removing the disk drive cover and manually adjusting a screw in the direction required to calibrate your drive. This test is the most accurate disk drive test for the Apple that I have seen to date.

As for all the other cards being produced for the Apple, communication cards, printer boards, 80 column boards etc, this package provides no support.

Conclusion

This package leaves a great deal to be desired for the advanced user. However, for the average user, this does provide some help in the maintenance of an Apple II. Anything else requiring more than adjusting the disk drive, for the most part should be referred to your local dealer.

SOFTWARE REVIEW: PROFILER: A DATA BASE MANAGER
by Gary Krause

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*****
*               Publisher : Custom Computer Products               *
*               355 Costa Mesa St.                                *
*               Costa Mesa, California 92627                      *
*               (714) 548-5429                                     *
*               Type of Program : ProDos Data Manager              *
*               Copy Protection : None                             *
*               System Requirements : Apple II, II+, IIe, IIc with 64K, 1 drive *
*               Options Supported : Several 80 column cards, Profile, Printer *
*               Desirable Components : Inexpensive, Easy to Learn, Vendor Support *
*               Price : $49.95 (to Club members)                   *
*               Rating : ****+                                     *
*                                                                 *
*****

```

Let me begin by defining what a database is. A database is a structure designed for the storage, manipulation, and retrieval of data (or information). In particular, a true database allows one to set up and relate many pieces of information. The data is stored in "forms" (much like an application form or a W-4 form). For example, a company might have one form designed to hold information about its customers, a second form for its salesmen, and a third form to record sales transactions between the two. The database can be used to combine and sort information from the three forms and produce various reports. This can get very complicated in a hurry. Full databases require some sort of command language to define these structures -- by their very nature they can't be predefined. Even the best of these requires the user to do some programming.

As a subset of databases, we have what we might call file managers. These can be menu driven since they restrict you to a single form (in other words, you can't relate the data in two different forms). PFS:file fits into this category, as does Profiler, the subject of this review (about time I got to it, huh?). Even this subset can be very useful and file managers generally gain in ease of use what they lose in flexibility. A file manager is essentially an indexed card file set up on your computer, with the ability to set up reports based on sorted, selected data in the file.

Profiler is not copy-protected (a definite plus), and uses standard ProDos disks to store its data files. Thus, several different forms may be stored on a single disk (assuming sufficient room). An advertisement indicated a limit of over 65,000 records per form. You will probably need a hard disk to test that. ProDos will not boot, as I understand it, on an Apple II with Integer Basic in ROM, but will work fine on a 64k Apple II+. I have a //e with a non-extended 80 column card, two drives, and a printer in slot 1: Profiler supported all these. As a side effect of ProDos, Profiler has no sensitivity as to which drives your data and programs are in.

The ad said this was a "Limited offer -- test market special". Since Profiler is roughly the equivalent of pfs:FILE + pfs:REPORT, which retail together for over \$200 (and copy-protect your data: at least the version I had did), Profiler has to qualify as a "best buy". On the other hand, it is clearly a new product. The manual was in a loose leaf notebook and clearly needed editing though all the problems I saw were either minor or clearly typos. An attached note stated that editing was in progress. I also produced what seemed to be a "hang" in the report generator (by ignoring directions: see below). I now think it was a documentation gap. No data was lost or damaged by any of the problems I found. Two patches (the editor received 3 additional patches after the review was completed) have been sent us since Profiler arrived, which is a good sign for the future support for this product. Even with the documentation problems, this is an excellent product.

The manual is written in tutorial format which makes it easier for a new user to get acquainted than reference format. I easily went through two-thirds of it in a couple of hours. The next day, I had no trouble designing my own form, entering, and editing data with little reference to the manual. While trying to use the report generator the same way, without first reading about it, I generated an error which appeared to "hang" the program. Control-reset took me back to the report menu. I got a syntax error message on one line, and a "C" on the line below. A message (possibly Press Control-reset) appeared to flash on the screen just before this happened.

The main menu provides four options (in addition to Quit). The four options are: 1. Design/Modify Form, 2. Enter Data on Forms, 3. Search/Update Forms, and 4. Print Reports. This is also where you provide the name for your form (filename). Once this screen is up, you do not need the program disk unless you select Print Reports. Each of these will be discussed in order.

1. Design/Modify Forms.

This takes you to a sub-menu with three options. The first is to design a new form. The form size will depend on your application. Each screen allows 21 lines and 40 or 80 columns depending on your hardware. One screen is called a page of the form. You may use up to 16 pages for your form. Profiler uses all four arrow keys on the //e for cursor movement (the II+ will use the control key equivalents). Control-Q will briefly list all such editing key assignments at any point.

You define a form by typing in a picture of a blank form. Areas in which you will want to enter data will be left blank. These areas are called fields. The characters you type in before the blank area, ending with a colon, are called the field names. Fields and field names require no more definition than typing them in. Profiler does not recognize any commentary characters on the form as separate from the field names. If you put a title on the form, a list of possible entries to a status field, or a line across the screen to make it look nice, whatever you enter will be considered part of a field name. This really isn't too big a problem. A full database would use the field names to relate data on different forms. Profiler has two uses for the field names. The field names serve as default column headings in the report generator. The other use occurs in submenu 2, modifying a form. If the field name is not changed, you may add, delete, or change the order or position of fields without losing any data. If you think you may need to redesign your form with data present, you should be careful in your choice of field names.

The second submenu selection is for modifying forms. Profiler will allow you to completely change the form if you wish. Data in fields for which the field name still matches will still be there after modification.

The third submenu selection allows the selection of index fields. Profiler keeps three index files on disk keyed to your data file. The first field of your form is automatically one of these. The other two may be selected (or redefined) whenever you wish. The index fields define the fields you may use for sorting the order in which you search or print reports from your database.

2. Enter Data on Forms.

This selection is fairly straightforward. You may back up or move forward through pages and fields. When you finish a form, control-S takes you to the next one. Control-S at the beginning takes you back to the menu. One very nice touch is that Profiler automatically allows one extra field (called EXTRA PAGE:) on the page following the last page you defined. This page takes up no room if you don't use it, but can be very handy for additional comments.

3. Search/Update Forms.

Selecting this option provides you with a submenu: 1. LEAF THRU FILE, 2. SELECT BY FIELD, 3. EXIT. LEAF THRU FILE goes through the file record by record to locate the one you want. The order may either be by first field or by one of the other two index fields you previously selected. You may "force" an index field here: it will replace your index selection 3. SELECT BY FIELD presents you with a blank form on which you place selection criteria. The standard six inequalities are available for numeric fields. For alpha fields, you may use a "@" to represent any single character and "*" to match any string. When a match occurs, you may edit the information or delete the record entirely. The delete record option is not documented on the screen. If you select it you are asked for confirmation before the action is carried out.

4. Print Reports.

This selection brings up the Profiler report generator menu: 1. Design Free Form Report, 2. Design Columnar Report, 3. Print Predefined Report, 4. Exit. The two types of reports are considered below. As selection 3 suggests, Profiler allows you to save a report for later printing. There is no apparent limit to the number you may save, although they must be saved on the same disk as the data files. I'm not absolutely certain of this, but from the way Profiler gets file names, this seems to be the case. Profiler requires the printer card be in slot #1, and has no printer configuration section or ability to issue printer commands within your reports. I produced condensed print on my printer (Okidata microline 83A) by setting it before I entered Profiler. Profiler supports three printer widths: 80, 96 and 132. For both types of report and for predefined reports, you may choose selection criteria (and index) along with printer width and paper length (1-66 lines) before printing. You may specify order and selection criteria as in Search/Update.

Free Form Report.

When you make this selection, you are given a blank form in which to enter printing specifications. A control-S here prints the form on paper as it is on the screen, with a form feed between each record. If you enter editing specs, only those fields specified will be printed. You will be asked before printing whether to print field names. The printing specs are designed to allow the printing of mailing labels, which I was able to do very quickly. They are somewhat more general than that, however. Such options as word wrap in text fields, imbedded form feeds, and skipping several lines before or after a field are available. The major restriction is that fields must be printed in the order found on the form. If you have the zip code before the name on your form, you can't reverse the order for this report.

columnar Report.

Profiler limits you to nine columns. Again, you may simply hit control-S to get a default report. The column headings may be the field names (default) or you may specify them. Profiler automatically adjusts the column width depending on paper width and possibly data width and heading width. There appears to be no method for the user to override this. The columns may contain fields from the form or may be calculated from previous columns. You have complete control over the order of the columns. You select those you wish to print by giving it a column number. Totaling, item count, averaging and the four primary math functions are available. You may also calculate on selected columns (column 1 times column 4). Subtotals are available based on breaks in column 1.

In summary, this is an excellent product. If a file manager is sufficient for your needs, you probably can not find a better buy. In addition to not having the copy protection hassles, the use of ProDOS has several potential advantages. It should require very little effort to amend this program to run on any larger disk format Apple may come out with in the future. Changing may be as simple as replacing the ProDOS files on the disk. I also noticed that my disk drives, which can honk very loudly with Applewriter were very quiet under ProDOS, even when I'd removed the disk!

A REVIEW OF THE DAISY PROFESSIONAL STATISTICAL PACKAGE FOR THE APPLE

by William R. Hazard, PhD

```
*****
*                               *
*   Publisher : Rainbow Computing   *
*                               *
*   355 Costa Mesa St.             *
*                               *
*   Costa Mesa, California 92627    *
*                               *
*   (714) 548-5429                 *
*                               *
*   Type of Program : Advanced Statistical Analysis *
*   Copy Protection : Backup provided *
*                               *
*   System Requirements : Apple II, II+, IIe, IIC with 48K, 1 drive *
*   Options Supported : Interface to Multiplan and General Mgr. ($100)*
*                               *
*   : 128K (with //e), 80 column card, Ultraterm *
*                               *
*   Desirable Components : Extensive statistical capabilities *
*                               *
*   Price : $199.95                 *
*                               *
*   Rating : ****+                  *
*                               *
*****
```

The opinionated ones who say "You can prove anything with statistics" ought to try the Daisy Professional by Rainbow Computing.

This state-of-the art package of useful statistical programs has more built-in safeguards and cross-validations than a dog has fleas. For example, model testing compares fitted and residual values in the regression equation. "Lagging" the data in a time series also is designed to make it difficult if not impossible to "lie" with statistics, if the analyst is so inclined. The user is cautioned to throw out results that do not meet strict requirements of the statistical model being used. These warnings are included in output and would have to be suppressed to be ignored. Such a

flag is "Warning: Loss of Significance," as the result of an internal check of a matrix inversion.

Another example of the basic honesty of the Daisy Professional is the "Flip" routine, which splits available data into two subsets, with one subset being used for model development and the other to be used for model validation.

DAISY means "Data Analysis Interactive System." The descriptions are prepared in a friendly, conversational, well-edited style that makes the use of statistics painless even for the beginner. One word of caution, however, DAISY is not an elementary course in basic statistics. She has advanced prediction routines generally taught at the intermediate level in college, such as multiple, stepwise and partial correlation/regression. DAISY assumes that the analyst knows what statistical test is required by the nature of the problem at hand, and also rudimentary knowledge of how to interpret results with standard look-up tables, such as "Distribution of F," or "Critical Values of U in the Mann-Whitney Test."

DAISY is supplied with a protected pre-copy program disk and a second disk that includes sample data arrays, which can also be used as a back-up for booting purposes.

The instruction manual is conveniently arranged into 19 sections, beginning with a tutorial on how to use DAISY, and progressing through data organization, basic statistics (both parametric and non-parametric), correlation, regression, hypothesis testing, and printing and utility commands.

DAISY data can be sent to Visi-Plot or other graphics packages by using a standard DIF format, although a limited number scatter plot routines are available within DAISY itself for use on non-graphics printers.

Some of DAISY'S good-looking features which distinguish her from homely imitators are her manipulative abilities, such as Hide and Recover, Purg (for packing a table and removing inactive columns), Flip and Sort. These front-end and other transformations help DAISY handle missing data as "M" values in all routines. (In a few cases, DAISY will notify you that missing values are not permitted, such as in analysis of variance routines).

However, DAISY's best looking feature, in the eyes of this beholder, is her PRED function, which can predict values of a dependent variable when supplied with new values for one or more independent variables, which is what multiple regression is all about. In other statistical packages, the analyst must transform regression weights to arrive at a prediction, whereas in DAISY, this is done automatically.

DAISY's regression routines are thus her strongest suit. She also has a good mix of parametric and non-parametric basic statistics.

Due to memory requirements DAISY leaves something to be desired in her handling of explanatory statistics. For example her cross-tabulation and scaling routines are simple-minded when compared to interaction detection programs on the market, such as Automatic Interaction Detection and other lattice-type models. She also seems to be a bit blind to Likert-type scaling opportunities. Scalogram Analysis, for example, is an order of magnitude more sophisticated (and useful) than the Runs test in DAISY's program library. The addition of Likert or Thurstone scaling capability would broaden DAISY's attraction for political pollsters without masking her other charms.

In short, DAISY may not be the best looking girl around when compared to the big-time floozeys, but in her price range, nobody can touch her.

SOFTWARE REVIEW: Lexicom 3.0

by Stuart Greenfield

Summary

Program: File Conversion	Publisher:
Purpose: Convert Dissimilar Files	Micro-SPARC, Inc.
Equipment Req'd: 48k Apple II,II+,//e	P.O. Box 325
Disk Drive, Monitor	Lincoln, MA 01773
2nd Drive for CP/M	
to DOS	
Optional Equip.: Printer, Second Drive	
Suggested Retail Price: \$39.95	
Rating on a scale of 1 to 5: 4 (no backup)	

And you thought all files created by Apple programs were equal. Well, for those of us who have had our Apple's or Apple-compatible machine for more than two weeks we know that many programs create their own type file. This is especially true when dealing with word processors, the type of programs you would usually use when exchanging (either by disk or over a modem) information with another user. To our rescue has come Micro-SPARC with their LEXICOM 3.0, "a fast, ease-to-use utility for converting word processing and text files so they can be used by other programs." Lexicom offers the user 13 file conversion options ranging from converting Applewriter I files to SUPERTEXT files, text to both Applewriter and SUPERTEXT and vice versa, random to sequential and CP/M to DOS 3.3 Text. This last feature is especially worthwhile when you need to convert a Wordstar file to a text file for submission to your editor. Two other features contained with this utility are converting program files created in Applesoft into text files or from Muse's Robot War game into standard Apple text files. Once this conversion is done the newly created text files can be modified within any word processor which utilizes standard Apple text files.

Having had to convert dissimilar files so that I could edit them for publication, I have found this utility to be most useful. For those of you who are upgrading from either older versions of Supertext or Applewriter 1.1 the capabilities of Lexicom are most desirable. In my case, having the capability to convert CP/M files to standard text files is most useful. (All you Wordstar users can now send me your contributions and not have to worry about mine not having a CP/M oriented word processor.)

I find that Lexicom 3.0 offers significant enhancements over version 2.0 at no additional cost. However, I do have one complaint about the program. In order for me to update (the cost was \$5.00) version 2.0 to version 3.0, it was necessary to send my original disk back to Micro-SPARC. Since the disk is copy-protected this meant that I did not have use of the program while it was being updated. I mentioned this to David Szetela the author of the program and I think they will change their policy, since I do not think one should have to forego use of their program when it is being updated.

Micro-SPARC has provided users with a very useful utility for those who work with programs which create dissimilar file structures. If this is your situation I highly recommend that you include LEXICOM 3.0 in you library of disk utilities.

SOFTWARE REVIEW: SIMPLY PERFECT: Is It Perfect?
by Stuart Greenfield

Summary

Program: INTEGRATED WP-DB	Publisher:
Purpose: Word processing and	LJK, Inc.
Equipment Req'd: Apple //e with	7852 Big Bend Blvd.
extended memory,	St. Louis, MO 63119
1 disk drive and	
printer	
Optional Equip.: Second Drive	
Suggested Retail Price: \$189.95	
Rating on a scale of 1 to 5: 4.5 (for two functions evaluated)	

Since getting my Apple in 1980, my primary use has been word processing whether for work or as editor of the Dillo. In these years I have had the opportunity to review and tryout numerous word processors (this has been especially true, since the Club has begun reviewing software), however I have usually felt that the time and effort needed to master a new word processor was not worth it. For this reason I have continued to use SuperText, which was the original word processor I learned to use. In fact, I continued to use SuperText (I currently use SuperText Pro) because none of the word processors that I've had the opportunity to try offered me features, in excess of SuperText's, that I felt were worth enough to expend the time to learn. The feature that I most wanted from a word processor was being able to merge information from a data base into a form letter without having to run eighteen other programs. Yes, Wordstar has Mailmerge, Supertext has its Address Book and Form Letter modules and Applewriter has WPL and Quickfile, however each of these required running another program to achieve the mail merge function. Well, fans the people at LJK, Inc. have come to my rescue and I think to the rescue of many other Apple //e (a //c version is expected shortly), who have, are and continue to search for an integrated word processing package. While, I been told since early childhood that nothing is perfect, LJK's Simply Perfect is pretty close and given its price of \$189, it offers what I consider to be one of the best values in Apple software today. But enough of my biases, what does Simply Perfect offer a perspective purchaser?

To begin with, Simply Perfect requires an Apple //e with an extended 80 column board and at least one disk drive. However, if you want to take full advantage of the data base and spelling checker integration, two disk drives are needed. For those of you who have a hard disk, yes it is possible to write a disk driver to interface SP with different types of disk drives. In fact, an example of a hard disk driver for the Xebec drive is presented in an Appendix. While this information did not make much sense to me (my knowledge of assembly language is comparable to my knowledge of Sanskrit), providing this information to the user is most welcome, since most of us envision the day when a gigabit of on-line storage will be next to our trusty Apple. You might ask why a software vendor provides one with this type information when we all know that it's next to impossible for most software in the private domain to work with anything but standard Apple drives because of the elaborate, but usually ineffective, copy protection schemes found with almost all commercially available software. Well, the answer is that SP is not copy protected. Yes, let me repeated that, SP is not copy protected. So for those of you who have both a dot matrix and letter quality printer you do not have to re-install the control codes, etc when you use your other printer. In fact, the SP disk contains standard configurations for a number of printers, including Epson, Apple DMP, Okidata 92, Qume and NEC Spinwriter. Should your printer not be included, worksheets are provided for indicating the escape and control codes associated with your printer so SP will be able to fully utilize the capabilities of your printer. One other notable feature is that SP will utilize the Videx Ultraterm board with its various display modes as long as you have an extended 80 column board. As you can tell from the above SP can be configured for in just about any way you could want now and in the future. But what about its word processing, data base, spelling and terminal capabilities.

The first task you are asked to perform with SP is to make a backup copy of your program disk with the COPYA program found on your Apple Master Disk. Upon completing that task you are instructed to place the SP program disk in a safe place and use your newly created backup as your working copy. Or if you would like, I assume LJK will accept your check for \$20 or \$30 and send you a backup. (Isn't this what most reputable software manufacturers do???) You are next informed how to configure the program to take advantage of your particular computer setup. When configuring SP you are asked for the type of video display you have (while you must have the Apple //e extended 80 card SP will take advantage of the Videx Ultraterm). The next menu sets the unit default assignments. If you have a two drive system all you'll probably need to do is accept the default assignments. Just remember that once SP is loaded the program (the backup you just created) can be taken out of the disk drive and you will not need to access it again, since the entire program (both word processor and data base) are maintained in memory. For this reason your data disk for your Letter Perfect files is located in drive 1. Data Perfect file disks are maintained in drive 2. The reason for this particular configuration is when you later what to merge information from your data base into a letter, the operation is easily performed with this setup. After accepting or modifying this menu, one is shown a display of the printer drivers that are available. If your printer is shown on the menu you would load that driver (the Epson driver is loaded by default when first configuring the program) and answer 'no' if you do not what to change the driver routine. What is contained in the various print driver routines is found in the Appendix. In the Appendix is also found an explanation of what features are supported among the various printers along with blank worksheets if you care to develop your own print driver routine.

After you have configured SP for your particular setup, you can then begin using either the word processor or file manager. Both programs always reside in memory and all that is necessary to switch between them is to select which function you would like to perform from the main menu. In the SP manual the word processing tutorial comes first and this is where we will start. A file called "sample" is stored on the disk which is utilized to lead you through the tutorial. The tutorial instructs you how the various commands in SP are utilized to load and edit this file. For those of you who want to immediately get into using the program all you need to do is select the edit command from the main menu and you will immediately be presented with a blank screen to begin creating text. Available for your document is 39678 bytes, which is equivalent to approximately 11 pages of text. (SP was not able to take advantage of the additional 64K available on the extended 80 column board I am using.) There are approximately 65 commands which make up Simply Perfect. These range from 'advance by paragraph' (esc A) to the 'underline toggle' (ctrl N). A handy reference card is provided which lists these commands and the escape or control sequence which activates each. Most of these commands are quite logical, i.e., a goto beginning of text is esc B, while a replace is a ctrl R and quitting the editor is a ctrl Q. In all, I was quit impressed with the range and versatility of the commands available within the editor. One of the more useful features is that for most of the commands which could delete major portions of your text, SP requires you to press the '#' key (shift 3) before it will complete the selected deletion operation. commands available within the editor. One of the more useful features is that for most of the commands which could delete major portions of your text, SP requires you to press the '#' key (shift 3) before it will complete the selected deletion operation.

After you've completed composing your text, you can check your spelling and redundancy by exiting your document (ctrl Q), which will return you to the main menu. From the main menu, select the VERIFY option (all you need to do is strike 'V') and SP will begin a count of the number of total and different words contained in your document. If you have a two drive system you should have placed the Spell Perfect disk in drive two and a search of the dictionary will commence. The dictionary search will indicate the number of unlisted words along with the number of different words. After these counts have been completed you are asked what operation (Ignore, Match, Change, Quit) you would like performed on the unlisted words. Except for the 'match' command, the other commands are self explanatory. The match command is useful when you are not sure of the spelling of a word. When an unlisted word is highlighted during a spell checking and your not quite sure what you intended to write striking 'M' will present you with a list of words which sound like the word highlighted. Any of these words can be selected to replace the highlighted word. In checking the text for some of the

articles in this month's articles I usually found that about 10% of the words (e.g., DILLO, byte, Stuart, NEC, etc.) contained in the article were unlisted. Not to worry, the basic dictionary can quite easily be updated. First you should have backed-up the dictionary disk, then type the list of words you want added to the dictionary in the editor, return to the main menu and select the "Update" option from the main menu. You will be presented with a number of options (Add, Delete and Backup) from which to select. By choosing Add, the words contained in the editor will be added to your working dictionary. I was not able to determine how many words are on the Spell Perfect disk, nor was there any mention of how many words could be contained on a dictionary disk. Other than this shortcoming I was very impressed with how easily it was to use the speller in conjunction with documents. No need to boot a spelling checker program and then remember the name of the file you want checked.

(Editor's Note: Due to time constraints, the review of the data base, mail merge capabilities, et al will be continued in next month's issue. Up till this point I am greatly impressed by the program and highly recommend it for anyone looking for an integrated word process, file manager (thanks Gary for pointing this out), and spell checker. While the review is only partially complete my rating of the program on only the two capabilities so far reviewed will hold, unless the file manager portion of the program is a complete waste.)

Know Your Apple
from
Muse Software

This package is a \$39.95 alternative to Apple's "Apple Presents ... Apple" package. KYA (Know Your Apple) goes into a little more depth than does Apple's package, and is slightly more advanced. It has five "lessons" on the disks which take you through the Inside, Back, Disk Drive, Keyboard, and Monitor. All is done in Hi-res Graphics and is very good visually. The Disk Drive lesson is quite interesting in its size comparison of a dust particle, a fingerprint, a human hair, and the space between the read/write head and the actual disk. Overall, though, this program left me kinda unimpressed. I wasn't much more informed after than I was before, but when my mother tried the program, she seemed to be really helped by it. (If you haven't already guessed by now, she still thinks my apple is an oversized calculator/game machine, but then again, parent's never did know much). The other problem is the price. \$39.95 seems a bit hefty for a demo program, especially considering that Apple's introduction demo disk is free with the //e system. Unless you have almost no experience with your Apple, I don't suggest you buy this program, but if Apple's demo disk leaves you with some questions that you can't seem to figure out or understand from the manual, Know Your Apple from Muse might be a good idea.

Gavin Clarkson

Horizons Unlimited

205 Lakeshore Drive
Lindenhurst, Illinois 60046

SHAPE TABLES ARE EASY!-but only with the DRAWINGBOARD, an automatic shape table creator. Explore the world of Apple hi-res graphics, but without the hassle of creating your shape tables by hand. Just draw from the keyboard (NO extra hardware), and create any hi-res shapes you want. Modify your shapes, merge shape tables, build and edit hi-res pictures, save them in normal or compressed format, dump pictures to your printer, and more. Works with any shape tables, not just your own. Includes a completely relocatable picture compressor/expander to be used with your own BASIC programs. For Apple II+, IIe, IIC. Professionally packaged. \$24.95 check or money order. Includes shipping. Horizons Unlimited, Creative Software,

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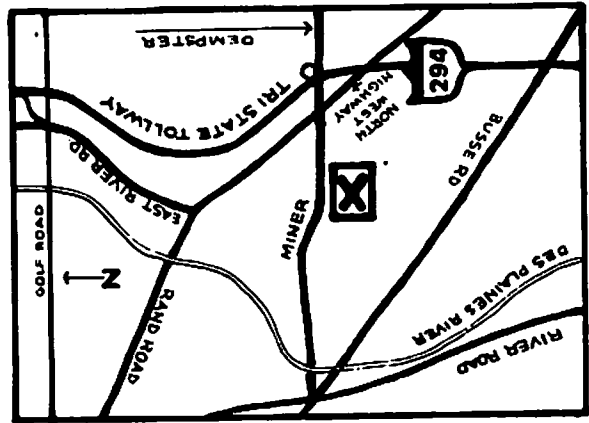
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312-940-7547

SOFTWARE REVIEW: FONTRIX

By Dan Eggleston

Summary

Program: Fontrix

Purpose: Printing of various typestyles, & combination of graphics with fonts.

Apple II (Applesoft in RAM), II+, (48K)

//c or //e

Recommended: Printer

Optional: paddles, joystick, mouse, or tablet

Suggested Retail Price: \$75 (\$20 for Fontpak disks)

Rating: Excellent, 4.5 (on scale of 1 to 5)

Publisher:

Data Transforms

616 Washington

Denver CO 80203

(303) 832-1501

If you need to write in various fonts and/or mix them with your graphics programs, then Fontrix can meet those needs. Fontrix is a very powerful utility which allows you to create and print pictures, using up to 16 high-resolution screens. Fontrix comes with 12 fonts, including Old English, italics, script, Greek, and Algebra. There are at present 3 Fontpak disks each of which contain 10 additional fonts. These include: electronics, flow chart, geometric, music, astrological, floor plan, math symbols, border designs and a set of icons. A new version recognizes Apple's Mouse and the Koala Pad, as well as most paddles, joysticks, trackballs, and graphics tablets. You can configure the new release to the Imagewriter as well as to most other types of printers and interfaces.

When you first boot Fontrix, you are given the option of viewing an excellent demonstration, editing a font, printing, creating a graphic image, or configuring your disk. The first thing you should do is configure your disk. You will probably find that your printer, interface, joystick, etc. have been included. When you are ready to create a picture you have 2 options: to create a single screen picture, or to create a Graffile. The latter requires an initialized disk, and allows you to create a single picture containing up to 16 screens, with a total of 480 sectors on your disk. The well-written manual explains that a standard binary picture file contains thirty-four sectors. Of these, two contain catalog information, thirty contain the picture, in a 5 by 6 matrix, and the other two contain no useful information. Fontrix allows you to expand this so that you may, for example, create a picture which is 10 by 15--2 screens wide and 2.5 screens high. As you reach the edge of the screen while working on a Graffile, part of the picture is transferred to the disk, and the picture then scrolls in the direction in which you are working. The sample created with this review was 15 by 24 (12 hi-res screens full). As you can see, you may load a picture file as part of a Graffile. You may also save a portion of a Graffile as a single picture file.

It is possible to load a new font at any time, and place any character (or icon) wherever you wish. A game controller or "mouse" allows quicker movement around the screen, and characters may be placed on the screen with the buttons. You may create a rectangular window on the screen and work only within that area. There are 32 patterns (see sample) which you can include as a background. If you wish, you may print all characters in inverse mode. There is also an overlay mode which allows you to place one character on top of another without erasing the background. This is helpful, for example, in placing notes on a staff as you work with the music font. There is a "Yank" command which corrects human error on a Graffile, and is similar to the "undo" command of the Mac and Mousepaint. You may also vary the spacing between characters to allow the script font, for example, to resemble cursive writing. Most fonts (not all) have lower case letters, and Control-C allows II+ users to switch between cases. Those with //e's can type in lower case by using the Shift key. At all points in the program, a menu or a help screen is available.

An excellent font editor allows you to edit any Fontrix fonts or to create your own, and has the capacity to copy or overlay a character, which saves time in creating similar items. If you wish, you may save these new fonts on disk.

After you have created a picture, you may want to use the screen-dump routine and magnify an image to any scale you wish. Any hi-res image, whether created with Fontrix or not, may be printed with this part of the program, and you can magnify an image to any scale you wish. The sample shown was printed scale 1. Printing at scale 3 with a single screen will fill a normal 8.5" sheet; if you choose a larger scale, it will print as much material as will fit on your paper. You may print in inverse or normal; left, center, or right justified; 8.5" or 14". You may center vertically, or start printing at the printer head's present location. You can also set a left margin anywhere between 0 and 64,000 (measured in pixels). This is the slowest portion of the program; its speed depends on your printer and the picture size. The sample took 5 minutes to print on an FX-80 and 8.5 minutes on an MX-80; a reasonable time, considering that the picture consisted of 12 hi-res screens.

Fontrix is a powerful and useful program. It is easy to use, reasonably priced, and produces excellent results. The program comes unprotected and may be listed and modified to meet your needs. In the last issue of Softalk, it was number 4 in the hobby top 10, indicating that it is quickly becoming a very popular program.

LIBRARY NEWS

A Report on NIAUG Library Diskette # LOGO 1

by Ralph E. Meyer

This diskette was obtained from IAC #38 - Dallas Apple. It requires the Apple LOGO (LCSI) bootup disk to operate. The programs contained on the disk are on the attached sheet.

Although it includes a "startup" program. This program does not contain the usual procedures found on the LCSI Logo disk; that is, the procedures for ARCR, ARCL, CIRCLEL, AND CIRCler are not included. Therefore, you will find that you will have to use the STARTUP procedure from the bootup disk to run a number of the programs. Also, if you attempt to play more than three or four of the longer programs (10 or more sections), you will run out of space. This means that you will have to reboot the disk with the master logo disk, re-insert the Logo 1 disk and load the program again. One other common problem on this disk is that the name of the program is not the name of the procedure that begins the program once

it has been loaded. Therefore, it is wise on each program to hit POTS to get the list of procedures. This will tell you if the name of the program is included in one of the procedures. Often a procedure named BEGIN, START, OR INSTRUCTIONS will be found. These are usually good procedures to call to find out if the program will run.

That pretty much takes care of the negative comments. All of the programs do run. HANOI, ANIMALGAME, HANGMAN, OTHELLO, NAVIGATE, RANDOMLINES, and SMALLTIME were the most interesting to me. Most of these are common in other languages, but all of them run very well on this disk. They are usually fast, and I found no difficulty going through them, even when I deliberately made mistakes to test the ability of the programs to catch errors without hanging up.

In one sense building programs in LOGO just for the user to play is against the principles of LOGO. Therefore, I would like to add that the other programs are ideal for helping LOGO users observe the building of procedures. This of course goes for the games mentioned above, but the shorter programs are really better suited to the task of analyzing programming techniques used in LOGO.

Personally, I would recommend this disk for anyone who has the LCSII LOGO master disk. Moreover, if anyone is interested in getting the LCSII LOGO, I would recommend the new LOGO II which is written in PRODOS. This disk could then be transferred to that LOGO format. Then the Out Of Space error would occur less frequently, and the programs would run much faster.

DISK VOLUME 038

T 000	DALLAS APPLE LOGO	*T 017	FOODWARS.LOGO
T 000	DISKS #1 AND #2	*T 012	MAZE.LOGO
T 000		*T 003	SNOWFLAKE.LOGO
*A 002	HELLO	*T 007	GONGRAMS.LOGO
*T 002	STARTUP.LOGO	*T 014	CITY.LOGO
*T 006	HANOI.LOGO	*T 010	ARGUE.LOGO
*T 016	HANOI.GAMEFILE.LOGO	*T 010	TOOT.LOGO
*T 012	ANIMALGAME.LOGO	*T 005	WEBS.LOGO
*T 015	CLOCK.LOGO	*T 007	WEB1.LOGO
*T 007	TRACE.LOGO	*T 004	SLHWORM.LOGO
*T 017	3D.LOGO	*T 009	OTHELLO.LOGO
*T 007	PRISM.LOGO	*T 008	RANDOM.POETRY.LOGO
*T 022	ADVENTURE.LOGO	*T 010	NAVIGATE.LOGO
*T 020	OCCAM.LOGO	T 000	
*T 005	BUG.LOGO	*T 006	BEAR.LOGO
*T 005	FLWSNAKE.LOGO	*T 015	PICTURE.LOGO
*T 007	TWOGAMES.LOGO	*T 015	PATTERN.LOGO
*T 017	HANGMAN.LOGO	*T 017	SHOWOFF.LOGO
*T 007	STEP.LOGO	*T 006	DALLAS.LOGO
*T 018	FACE.LOGO	*T 018	RANDOMLINES.LOGO
*T 006	HOROSCOPE.LOGO	*T 019	DIGTIMER.LOGO
*T 011	PLAY.LOGO	*T 015	ROADRUNNER.LOGO
*T 003	SORT.LOGO	*T 020	PRESCHOOL.LOGO
*T 004	WORM.LOGO	*T 011	TEACH.LOGO
*T 010	TOOLS.LOGO	*T 012	LOGOQUIZ.LOGO
		*T 012	LOGOMATH.LOGO
		*T 017	SMALLTIME.LOGO

MAC LIBRARY NEWS

The NIAUG MACINTOSH LIBRARY has just taken a quantum leap forward with the following software additions. The software is listed both by disk and by program for your convenience. It will be available for purchase from the the disk library along with the the Apple II software

Mac 1			
Size	Name	Kind	Last Modified
25K	Sound	folder	Mon, Jul 23, 1984
1K	spiro1.bas	document	Fri, Mar 9, 1984
1K	spirograph	document	Mon, Mar 12, 1984
1K	spirotest	document	Sat, Mar 10, 1984

Mac 1			
Size	Name	Kind	Last Modified
6K	AdvancedNotes	document	Thu, Jan 19, 1984
3K	Bridge	document	Thu, Jan 19, 1984
1K	CHECK.BAS	document	Wed, May 2, 1984
1K	cirole	document	Sun, Mar 18, 1984
3K	color.bas	document	Mon, May 28, 1984
12K	Communications	folder	Mon, Jul 23, 1984
3K	DISASM.BAS	document	Wed, Apr 18, 1984
4K	DISKDMP1.BAS	document	Sun, May 6, 1984
4K	diskdmp2.bas	document	Fri, May 4, 1984
1K	Draw	document	Thu, Jan 19, 1984
3K	dsm.bas	document	Mon, May 28, 1984
10K	dsm3.o	document	Tue, Jul 24, 1984
21K	dvorak	document	Sat, Mar 24, 1984
0K	Empty Folder	folder	Mon, Jul 23, 1984
1K	fixfent.bas	document	Mon, May 28, 1984
1K	FLASH.BAS	document	Thu, Apr 12, 1984

Mac 1			
Size	Name	Kind	Last Modified
1K	god	document	Tue, Mar 13, 1984
6K	Largepic.bas	document	Sun, Jun 24, 1984
1K	lstfix.bas	document	Fri, May 4, 1984
2K	maccopy.bas	document	Wed, Mar 21, 1984
2K	macwidth.bas	document	Wed, Mar 21, 1984
3K	MAKEWRITE	document	Thu, Apr 12, 1984
4K	menu.bas	document	Fri, May 4, 1984
4K	MGLOBE.BAS	document	Wed, Apr 18, 1984
24K	MGLOBE.DAT	document	Wed, Apr 18, 1984
15K	MOUSETEP.BAS	document	Fri, Jan 1, 1984
5K	NEWSPLIT.BAS	document	Sun, May 6, 1984
1K	PICTURE.BAS	document	Sun, Mar 4, 1984
1K	PICTURE2.BAS	document	Wed, Jan 25, 1984
7K	QUICKDRAW	document	Wed, Mar 21, 1984
5K	RUDE.BAS	document	Wed, Apr 18, 1984
3K	shapmakr.bas	document	Mon, May 28, 1984

Mac 2			
Size	Name	Kind	Last Modified
9K	BINHEX.RM	document	Wed, Aug 8, 1984
19K	binhex.v3	document	Mon, Aug 13, 1984
4K	Blocksmith	document	Tue, Jul 24, 1984
30K	CATALOGUE	folder	Sat, Nov 3, 1984
5K	Diskette Catalog	document	Fri, Nov 24, 2028
2K	Diskette Catalog...	document	Fri, Nov 24, 2028
0K	Empty Folder	folder	Sun, Aug 5, 1984
2K	JOBS.APPL	application	Wed, Aug 15, 1984
7K	REDDTD3	document	Wed, Aug 8, 1984
9K	ROLO	application	Wed, Aug 8, 1984
1K	RoloFile	document	Thu, Aug 16, 1984
6K	SCRMAK1.APPL	application	Wed, Aug 15, 1984
126K	System Folder	folder	Fri, Nov 24, 2028

Mac 3			
Size	Name	Kind	Last Modified
46K	Dollars & Sense...	folder	Mon, Aug 20, 1984
166K	Dollars and Sense	application	Mon, Aug 20, 1984
0K	Empty Folder	folder	Thu, Aug 16, 1984
40K	Fred & Mary Sm...	Dollars and Sense document	Thu, Jul 26, 1984
0K	Scrapbook File	document	Mon, Aug 27, 1984
143K	System Folder	folder	Thu, Aug 16, 1984

Mac 4			
Size	Name	Kind	Last Modified
18K	Daleks	application	Mon, Apr 2, 1984
22K	Desk Acc. Mover	application	Sat, Aug 18, 1984
6K	Desk Accessory	Desk Acc. Mover document	Fri, Nov 24, 2028
0K	Empty Folder	folder	Fri, Nov 24, 2028
6K	Fred's Program	application	Mon, Jul 23, 1984
13K	Office Attack®	application	Sun, Apr 8, 1984
190K	System Folder	folder	Mon, Jul 23, 1984
6K	unole/editnew	application	Thu, Jul 26, 1984

Mac 5			
Size	Name	Kind	Last Modified
0K	Empty Folder	folder	Sat, May 12, 1984
9K	Life	application	Wed, Mar 7, 1984
11K	Princeton.Doo	document	Wed, Jul 18, 1984
6K	Princeton.Keys	document	Wed, Jul 18, 1984
7K	Read Me	document	Wed, Jul 18, 1984
232K	System folder	folder	Fri, Nov 24, 2028

Mac 6			
Size	Name	Kind	Last Modified
34K	Conformal Map	application	Fri, Jan 1, 1904
0K	Empty Folder	folder	Fri, Nov 24, 2028
61K	Font	folder	Sat, Aug 11, 1984
193K	N.D.	folder	Fri, Nov 24, 2028
41K	REED	folder	Fri, Nov 24, 2028
1K	Scrapbook File	System document	Sat, Oct 27, 1984

Mac 7			
Size	Name	Kind	Last Modified
0K	Empty Folder	folder	Sat, Oct 27, 1984
8K	Mac.Index1	document	Sun, Aug 5, 1984
12K	Mac.Index2	document	Sun, Aug 5, 1984
6K	Sample Disks Doo	document	Mon, Aug 6, 1984
278K	Samples	folder	Sat, Oct 27, 1984

Mac 8			
Size	Name	Kind	Last Modified
1K	adedit	document	Fri, Nov 24, 2028
21K	Alert EDIT	application	Thu, May 10, 1984
50K	Empty Folder	folder	Fri, Nov 24, 2028
7K	HexDump	application	Wed, May 23, 1984
9K	Life	application	Wed, May 23, 1984
7K	Read Me	document	Fri, Jun 1, 1984
9K	Reledex	application	Wed, May 23, 1984
1K	RoloFile	document	Tue, Sep 13, 1904
6K	Screen Maker	application	Wed, May 23, 1984
212K	System Folder	folder	Fri, Nov 24, 2028

Mac 9			
Size	Name	Kind	Last Modified
16K	basio terminal	folder	Tue, Jun 26, 1984
34K	basio utilities	folder	Tue, Jun 26, 1984
62K	Creator	folder	Tue, Jun 26, 1984
0K	Empty Folder	folder	Sun, Jul 22, 1984
61K	Graphio images	folder	Tue, Jun 26, 1984
51K	music stuff	folder	Tue, Jun 26, 1984

Mac 10			
Size	Name	Kind	Last Modified
1K	Demo Loader - R...	document	Mon, Aug 6, 1984
232K	DUser Programs	folder	Tue, Aug 7, 1984
6K	MacFair Promo	document	Mon, Aug 6, 1984
21K	UIDemo	applioation	Fri, Jan 1, 1904
73K	Video Board	folder	Fri, Nov 24, 2028

Mac 11			
Size	Name	Kind	Last Modified
11K	D.A.M. Instructi...	document	Tue, Jul 3, 1984
23K	Desk Acc. Mover	application	Mon, Aug 20, 1984
4K	Label	document	Thu, Jul 5, 1984
25K	Resource Mover	application	Thu, Jan 19, 1984
15K	ResScrap	document	Sat, Sep 10, 1983
17K	REVERSI	application	Thu, Aug 2, 1984
9K	REVERSI INFO	document	Fri, Jun 29, 1984
12K	Samples	folder	Fri, Jul 6, 1984
242K	Sys	folder	Sat, Sep 10, 1983

Mac 12			
Size	Name	Kind	Last Modified
0K	Empty Folder	folder	Sat, Oct 27, 1984
6K	maoart.v11	document	Wed, Jul 25, 1984
3K	maocopy.v13	document	Wed, Jul 25, 1984
3K	maocopy.v14	document	Wed, Jul 25, 1984
9K	maoplt.bas	document	Wed, Jul 25, 1984
11K	MaoTEP.v181	document	Wed, Apr 18, 1984
20K	maugte	document	Wed, Jul 25, 1984
14K	maugte.bas	document	Wed, Jul 25, 1984
4K	menu.dem	document	Wed, Jul 25, 1984
3K	mglobe.bas	document	Wed, Jul 25, 1984
17K	mouse.tep	document	Wed, Jul 25, 1984
1K	moused.bas	document	Wed, Jul 25, 1984
7K	nerd	document	Wed, Jul 25, 1984
1K	notex.txt	document	Wed, Jul 25, 1984
3K	polist.bas	document	Wed, Jul 25, 1984
10K	print.v11	document	Wed, Jul 25, 1984

Mac 12			
Size	Name	Kind	Last Modified
1K	prints.bas	document	Wed, Jul 25, 1984
13K	promen	document	Wed, Jul 25, 1984
1K	remrem.bas	document	Wed, Jul 25, 1984
5K	rude.bas	document	Wed, Jul 25, 1984
1K	soout.hex	document	Wed, Jul 25, 1984
4K	snd4t.bas	document	Sat, Oct 27, 1984
2K	snd4t.min	document	Wed, Jul 25, 1984
7K	sndsw.bas	document	Wed, Jul 25, 1984
2K	sndsw.lei	document	Wed, Jul 25, 1984
6K	sref.bas	document	Wed, Jul 25, 1984
1K	string.doc	document	Wed, Jul 25, 1984
9K	tobiks.bas	document	Wed, Jul 25, 1984
3K	trim.bas	document	Wed, Jul 25, 1984

VNum	Volume (Diskette) Name	Size
1	Mac 1	195K
2	Mac 2	231K
3	Mac 3	400K
4	Mac 4	266K
5	Mac 5	271K
6	Mac 6	337K
7	Mac 7	306K
8	Mac 8	327K
9	Mac 9	230K
10	Mac 10	339K
11	Mac 11	369K
12	Mac 12	171K

File Name	Date	Size	Type	Orig	VNum	Volume (Diskette) Name
Acepai.hex	Jul 24 84	13K	TEXT	MACA	7	Mac 7
Adedit	Nov 24 28	1K			8	Mac 8
AdvancedNotes	Jan 19 84	6K	MSBA	MSBA	1	Mac 1
Alert EDIT	May 10 84	21K	APPL	8	Mac 8
Animation	May 23 84	6K	MSBB	MSBA	9	Mac 9
Art.bas	Jul 24 84	2K	MSBA	MSBA	7	Mac 7
Autote.187	Jul 24 84	20K	TEXT	MACA	7	Mac 7
Autote.bas	Jul 24 84	21K	MSBA	MSBA	7	Mac 7
BINHEX.RM	Aug 8 84	9K			2	Mac 2
Backg.4th	Jul 24 84	19K	TEXT	MACA	7	Mac 7
Ball.pas	Jul 24 84	3K	TEXT	MACA	7	Mac 7
Bauhaus10	Aug 1 84	3K			6	Mac 6
Bauhaus20	Aug 1 84	7K			6	Mac 6
Bigpic.bas	Aug 5 84	6K	MSBA	MSBA	7	Mac 7
Binhex.bas	Jul 24 84	8K	MSBA	MSBA	7	Mac 7
Binhex.v2	Jul 24 84	15K	TEXT	MACA	7	Mac 7
Binhex.v3	Aug 13 84	19K			2	Mac 2
Blocksmith	Jul 24 84	4K	MSBB	MSBA	2	Mac 2
Bridge	Jan 19 84	3K	MSBA	MSBA	1	Mac 1
CHEAPSORT.BAS	Mar 15 84	3K	MSBB	MSBA	9	Mac 9
CHEAPSORT2.BAS	Mar 15 84	4K	MSBB	MSBA	9	Mac 9
CHECK.BAS	May 2 84	1K	MSBB	MSBA	1	Mac 1
CREATOR.BAS	Mar 29 84	7K	MSBB	MSBA	9	Mac 9
CREATOR.LIB	Mar 29 84	7K	MSBA	MSBA	9	Mac 9
CREATOR2.BAS	Mar 29 84	7K	MSBB	MSBA	9	Mac 9
CREATOR3.BAS	Mar 29 84	4K	MSBB	MSBA	9	Mac 9
CREATOR4.BAS	Mar 29 84	4K	MSBB	MSBA	9	Mac 9
CREATORMIN.LIB	Mar 29 84	7K	MSBA	MSBA	9	Mac 9
Cairo.doc	Jul 24 84	4K	TEXT	MACA	7	Mac 7
Castle.hex	Jul 24 84	23K			7	Mac 7
Catalogger	Aug 5 84	3K	MSBA	MSBA	2	Mac 2
Catalogger Doc	Mar 11 14	6K	WORD	MACA	2	Mac 2
Circle	Mar 18 84	1K	MSBB	MSBA	1	Mac 1
Clipboard File	Nov 24 28	0K			2	Mac 2
Clipboard File	Jul 23 84	0K			4	Mac 4
Clipboard File	Nov 24 28	1K	CLIP	MACS	8	Mac 8
Clipboard File	Sep 26 84	0K			10	Mac 10
Clipboard File	Jun 25 84	0K	CLIP	MACS	11	Mac 11
Clipboard File	Nov 24 28	1K	CLIP	MACS	5	Mac 5

File Name	Date	Size	Type	Orig	VNum	Volume (Diskette)	Name
Color.bas	May 28 84	3K	MSBA	MSBA	1	Mac	1
Comm.	Jun 28 84	1K	MSBB	MSBA	1	Mac	1
Compar.bas	Jul 24 84	9K	MSBA	MSBA	7	Mac	7
Compare	May 27 84	9K	MSBB	MSBA	9	Mac	9
Conblk.4th	Jul 24 84	16K	TEXT	MACA	7	Mac	7
Conblk.txt	Jul 24 84	4K	TEXT	MACA	7	Mac	7
Conformal Map	Feb 6 40	34K	APPL	????	6	Mac	6
Connector pictorial	Feb 7 40	17K	PNTG	MPNT	10	Mac	10
Convert	May 24 84	3K	MSBB	MSBA	9	Mac	9
Curve.basic	Jul 24 84	2K	MSBA	MSBA	7	Mac	7
D.A.M. Instructions	Jul 3 84	11K	WORD	MACA	11	Mac	11
DISASM.BAS	Apr 18 84	3K	MSBA	MSBA	1	Mac	1
DISKMP1.BAS	May 6 84	4K	MSBA	MSBA	1	Mac	1
DSM.bas	Jun 2 84	3K	MSBB	MSBA	9	Mac	9
DSM3.0	Jun 2 84	9K			9	Mac	9
DUsers Demo #01 V 4.0	Aug 6 84	24K	MSBP	MSBA	10	Mac	10
Daleks	Apr 2 84	18K	APPL	DALK	4	Mac	4
Das.res	Aug 8 84	16K	????	????	3	Mac	3
Define.4th	Jul 24 84	5K	TEXT	MACA	7	Mac	7
Demo Loader - RUN ME FIRST!!	Aug 6 84	1K	MSBP	MSBA	10	Mac	10
Desk Acc. Mover	Aug 18 84	22K	APPL	DAMV	4	Mac	4
Desk Acc. Mover	Aug 20 84	23K	APPL	DAMV	11	Mac	11
Desk Accessory	Nov 24 28	6K	DESK	DAMV	4	Mac	4
DeskTop	Nov 3 84	4K	FNDR	ERIK	1	Mac	1
DeskTop	Nov 3 84	8K	FNDR	ERIK	2	Mac	2
DeskTop	Nov 3 84	3K	FNDR	ERIK	3	Mac	3
DeskTop	Nov 3 84	3K	FNDR	ERIK	4	Mac	4
DeskTop	Nov 3 84	5K	FNDR	ERIK	6	Mac	6
DeskTop	Nov 3 84	1K	FNDR	ERIK	7	Mac	7
DeskTop	Nov 3 84	2K	FNDR	ERIK	8	Mac	8
DeskTop	Nov 3 84	4K	FNDR	ERIK	9	Mac	9
DeskTop	Nov 3 84	5K	FNDR	ERIK	10	Mac	10
DeskTop	Nov 3 84	8K	FNDR	ERIK	11	Mac	11
DeskTop	Nov 3 84	1K	FNDR	ERIK	12	Mac	12
DeskTop	Nov 3 84	5K	FNDR	ERIK	5	Mac	5
Disk Copy	Apr 16 84	6K	APPL	QUIK	5	Mac	5
Diskcmp2.bas	May 4 84	4K	MSBA	MSBA	1	Mac	1
Diskdump	May 24 84	3K	MSBB	MSBA	9	Mac	9
Diskette Catalog	Nov 24 28	5K			2	Mac	2
Diskette Catalog (Backup)	Nov 24 28	2K			2	Mac	2
Dollars and Sense	Aug 20 84	166K	APPL	DAS	3	Mac	3
Draw	Jan 19 84	1K	MSBA	MSBA	1	Mac	1
Dskacc.mov	Jul 24 84	4K	TEXT	MACA	7	Mac	7
Dskcmp.bas	Jul 24 84	4K	MSBA	MSBA	7	Mac	7
Dskcmp.v12	Jul 24 84	4K	TEXT	MACA	7	Mac	7
Dskzap.bas	Jul 24 84	6K	MSBA	MSBA	7	Mac	7
Dsm.bas	May 28 84	3K	MSBA	MSBA	1	Mac	1
Dsm.v3	Jul 24 84	3K	TEXT	MACA	7	Mac	7
Dsm3.o	Jul 24 84	10K	TEXT	MACA	1	Mac	1
Dsm3.o	Jul 24 84	10K	TEXT	MACA	7	Mac	7
Dvorak	Mar 24 84	21K			1	Mac	1
Dvorak.bas	Jul 24 84	2K	MSBA	MSBA	7	Mac	7
EAGLE-OWL	Nov 24 28	18K	PNTG	MPNT	8	Mac	8
Earth	Apr 21 84	9K	PNTG	MPNT	9	Mac	9
Exec. Decision Maker	Jul 5 84	3K	DESK	DAMV	11	Mac	11

File Name	Date	Size	Type	Orig	VNum	Volume (Diskette)	Name
Explosion	May 27 84	4K	MSBB	MSBA	9	Mac	9
Extend.4	Jul 24 84	19K	TEXT	MACA	7	Mac	7
Extended Greek Fonts	Jul 12 84	4K	WORD	MACA	6	Mac	6
FLASH:BAS	Apr 12 84	1K	MSBB	MSBA	1	Mac	1
FRP Die Roller	Jul 6 84	4K	DESK	DAMV	11	Mac	11
File.inf	Jul 24 84	9K	TEXT	MACA	7	Mac	7
Finder	Jan 24 84	46K	FNDR	MACS	2	Mac	2
Finder	May 2 84	46K	FNDR	MACS	3	Mac	3
Finder	May 2 84	46K	FNDR	MACS	4	Mac	4
Finder	May 23 84	46K	FNDR	MACS	8	Mac	8
Finder	May 2 84	46K	FNDR	MACS	10	Mac	10
Finder	May 2 84	46K	FNDR	MACS	11	Mac	11
Finder	Apr 18 84	46K	FNDR	MACS	5	Mac	5
Fish	Jan 23 84	11K	PNTG	MPNT	9	Mac	9
Fixfont.bas	May 28 84	1K	MSBA	MSBA	1	Mac	1
Font Editor	Mar 7 84	32K	APPL		6	Mac	6
Font Mover	Mar 6 84	13K	APPL	FMOV	6	Mac	6
Font Mover	Mar 6 84	13K	APPL	FMOV	5	Mac	5
Font.dsp	Jul 24 84	3K	TEXT	MACA	7	Mac	7
Fontll.bas	Jul 24 84	2K	MSBA	MSBA	7	Mac	7
Fonts	Oct 27 84	1K			6	Mac	6
Food and flowers	Apr 21 84	7K	PNTG	MPNT	9	Mac	9
Forth.txt	Jul 24 84	8K	TEXT	MACA	7	Mac	7
Fred & Mary Smith	Jul 26 84	40K	DASD	DAS	3	Mac	3
Fred's Program	Jul 23 84	6K	APPL	????	4	Mac	4
Gaelic poem	Jun 12 84	4K	WORD	MACA	6	Mac	6
Garage.hex	Jul 24 84	15K	TEXT	MACA	7	Mac	7
Gcd	Mar 13 84	1K	MSBB	MSBA	1	Mac	1
Genoa12	May 24 84	3K			6	Mac	6
Genoa24	Aug 1 84	8K			6	Mac	6
Go.bas	Jul 24 84	13K	MSBA	MSBA	7	Mac	7
Greek Layout	Jun 15 84	20K	PNTG	MPNT	6	Mac	6
Greek Memo	Aug 7 84	4K	WORD	MACA	6	Mac	6
Greek24	May 30 84	10K			6	Mac	6
HELLO.TERM	Jun 28 84	1K	MSBB	MSBA	1	Mac	1
Hdwe/birds	Dec 11 83	12K	PNTG	MPNT	9	Mac	9
Heb-GK12	Aug 1 84	4K			6	Mac	6
Help	Aug 16 84	21K	????	????	3	Mac	3
HexDump	May 23 84	7K	APPL	RMKR	8	Mac	8
Hi!	Aug 16 84	5K	????	????	3	Mac	3
IStamp Disk	Jul 27 84	1K			8	Mac	8
IStamp Disk	Jul 27 84	1K			8	Mac	8
Icon edit's doc	Jul 28 84	1K	icon	ledt	8	Mac	8
Icon edit's icon	Jul 28 84	1K	icon	ledt	8	Mac	8
Icon edit's doc	Jul 28 84	1K	icon	ledt	8	Mac	8
Icon edit's icon	Jul 28 84	1K	icon	ledt	8	Mac	8
Imac and disk	Jul 28 84	1K	icon	ledt	8	Mac	8
Imac and disk	Jul 28 84	1K	icon	ledt	8	Mac	8
Imagewriter	Jun 22 84	17K	PRES	MACS	3	Mac	3
Imagewriter	Jun 24 84	17K	PRES	MACS	11	Mac	11
Imagewriter	Jul 18 84	17K	PRES	MACS	5	Mac	5
Insects	Dec 10 83	16K	PNTG	MPNT	9	Mac	9
Isystem icon	Jul 28 84	1K	icon	ledt	8	Mac	8
JOBS.APPL	Aug 15 84	2K	APPL	????	2	Mac	2
Label	Jul 5 84	4K	PNTG	MPNT	11	Mac	11
Largepic.bas	Jun 24 84	6K	MSBA	MSBA	1	Mac	1

File Name	Date	Size	Type	Orig	VNum	Volume (Diskette)	Name
Latvian	Jul 9 84	9K			6	Mac 6	
Life	May 23 84	9K	APPL	RMKR	8	Mac 8	
Life	Mar 7 84	9K	APPL		5	Mac 5	
List Catalog	Aug 5 84	8K	MSBA	MSBA	2	Mac 2	
Listfix	May 24 84	1K	MSBB	MSBA	9	Mac 9	
Littlelat	Jul 8 84	2K			6	Mac 6	
Lstfix.bas	May 4 84	1K	MSBA	MSBA	1	Mac 1	
MAKEWRITE	Apr 12 84	3K	MSBB	MSBA	1	Mac 1	
MGLOBE.BAS	Apr 18 84	4K	MSBA	MSBA	1	Mac 1	
MGLOBE.DAT	Apr 18 84	24K			1	Mac 1	
MOUSETEP.BAS	Feb 6 40	15K	MSBB	MSBA	1	Mac 1	
Mac logo	Mar 31 84	5K	PNTG	MPNT	9	Mac 9	
Mac.Index1	Aug 5 84	8K	TEXT	MACA	7	Mac 7	
Mac.Index2	Aug 5 84	12K	TEXT	MACA	7	Mac 7	
MacFair Promo	Aug 6 84	6K	MSBP	MSBA	10	Mac 10	
MacTEP.v181	Apr 18 84	11K	MSBB	MSBA	12	Mac 12	
Macart.v11	Jul 25 84	6K	MSBA	MSBA	12	Mac 12	
Maccopy.bas	Mar 21 84	2K	MSBB	MSBA	1	Mac 1	
Maccpy.v13	Jul 25 84	3K	MSBA	MSBA	12	Mac 12	
Maccpy.v14	Jul 25 84	3K	MSBA	MSBA	12	Mac 12	
Macplt.bas	Jul 25 84	9K	MSBA	MSBA	12	Mac 12	
Macwidth.bas	Mar 21 84	2K	MSBB	MSBA	1	Mac 1	
Math Font	Jul 18 84	22K	WORD	MACA	6	Mac 6	
Math1	May 21 84	4K			6	Mac 6	
Maugte	Jul 25 84	20K	MSBA	MSBA	12	Mac 12	
Maugte.bas	Jul 25 84	14K	MSBA	MSBA	12	Mac 12	
Menu.bas	May 4 84	4K	MSBA	MSBA	1	Mac 1	
Menu.dem	Jul 25 84	4K	MSBA	MSBA	12	Mac 12	
Mglobe.bas	Jul 25 84	3K			12	Mac 12	
More rsrcs	Sep 10 83	29K	ZSYS	MACS	11	Mac 11	
Mouse.tep	Jul 25 84	17K	MSBA	MSBA	12	Mac 12	
Mouse.term	Jun 5 84	15K	MSBB	MSBA	9	Mac 9	
Moused.bas	Jul 25 84	1K	MSBA	MSBA	12	Mac 12	
Music	Jun 5 84	9K	MSBB	MSBA	9	Mac 9	
ND Bauhaus	Aug 1 84	10K	FFIL	FMOV	6	Mac 6	
ND Cyril13-12	Aug 1 84	4K	FFIL	FMOV	6	Mac 6	
ND Foot10-12	Aug 1 84	3K	FFIL	FMOV	6	Mac 6	
ND Genoa	Aug 1 84	12K	FFIL	FMOV	6	Mac 6	
ND Hebrew12	Aug 1 84	4K	FFIL	FMOV	6	Mac 6	
ND Math1-12	Jul 19 84	4K	FFIL	FMOV	6	Mac 6	
ND New Math	Jul 24 84	15K	FFIL	FMOV	6	Mac 6	
ND Old Gaelic	Jul 27 84	9K	FFIL	FMOV	6	Mac 6	
NEWSPLIT.BAS	May 6 84	5K	MSBA	MSBA	1	Mac 1	
NY2	Jul 18 84	3K			6	Mac 6	
Nerd	Jul 25 84	7K	MSBA	MSBA	12	Mac 12	
Note Pad File	Jul 23 84	2K	ZSYS	MACS	4	Mac 4	
Note Pad File	Apr 22 84	2K	ZSYS	MACS	8	Mac 8	
Note Pad File	Aug 15 84	2K	ZSYS	MACS	11	Mac 11	
Note Pad File	Jul 19 84	2K	ZSYS	MACS	5	Mac 5	
Notex.txt	Jul 25 84	1K	MSBA	MSBA	12	Mac 12	
Office Attack	Apr 8 84	13K	APPL		4	Mac 4	
Old Church Slavonic	Aug 2 84	4K			6	Mac 6	
Original Clock	Jul 5 84	2K	DESK	DAMU	11	Mac 11	
Ornamental Arabic	Aug 2 84	13K			6	Mac 6	
PICTURE.BAS	Mar 4 84	1K	MSBB	MSBA	1	Mac 1	
PICTURE2.BAS	Jan 25 84	1K	MSBB	MSBA	1	Mac 1	

File Name	Date	Size	Type	Orig	VNum	Volume (Diskette)	Name
Paint1	Jul 23 84	2K			4	Mac 4	
Paint2	Jul 23 84	2K			4	Mac 4	
Pclist.bas	Jul 25 84	3K	MSBA	MSBA	12	Mac 12	
Print.v11	Jul 25 84	10K	MSBA	MSBA	12	Mac 12	
Prints.bas	Jul 25 84	1K	MSBA	MSBA	12	Mac 12	
Promen	Jul 25 84	13K	MSBA	MSBA	12	Mac 12	
QUIKDRAW	Mar 21 84	7K			1	Mac 1	
REDDTD3	Aug 8 84	7K			2	Mac 2	
REKEY.BAS	Mar 14 84	2K	MSBB	MSBA	9	Mac 9	
REPORTOR.BAS	Mar 29 84	6K	MSBB	MSBA	9	Mac 9	
REPORTOR.LIB	Mar 25 84	2K	MSBA	MSBA	9	Mac 9	
REPORTOR2.BAS	Mar 29 84	8K	MSBB	MSBA	9	Mac 9	
REVERSI	Aug 2 84	17K	APPL	REVS	11	Mac 11	
REVERSI INFO	Jun 29 84	9K	WORD	MACA	11	Mac 11	
ROLO	Aug 8 84	9K	APPL	ROLO	2	Mac 2	
RPN Calculator	Jul 5 84	3K	DESK	DAMV	11	Mac 11	
RUDE.BAS	Apr 18 84	5K	MSBA	MSBA	1	Mac 1	
Read Me	Jun 1 84	7K	PNTG	MPNT	8	Mac 8	
Reed Fonts	Aug 7 84	12K	FFIL	FMOV	6	Mac 6	
Remrem.bas	Jul 25 84	1K	MSBA	MSBA	12	Mac 12	
ResScrap	Sep 10 83	15K			11	Mac 11	
Resource Mover	Jan 19 84	25K	APPL		11	Mac 11	
Rice Fonts	Jul 18 84	34K	FFIL	FMOV	6	Mac 6	
RoloFile	Aug 16 84	1K	TEXT	ROLO	2	Mac 2	
RoloFile	Oct 19 40	1K	TEXT	ROLO	8	Mac 8	
Rolodex	May 23 84	9K	APPL	ROLO	8	Mac 8	
Rude.bas	Jul 25 84	5K	MSBA	MSBA	12	Mac 12	
SCRMAK1.APPL	Aug 15 84	6K	APPL	RMKR	2	Mac 2	
Sample Disks Doc	Aug 6 84	6K	WORD	MACA	7	Mac 7	
Sanskrit24	Jul 23 84	8K			6	Mac 6	
Scout.hex	Jul 25 84	1K			12	Mac 12	
Scrapbook File	Aug 27 84	0K			3	Mac 3	
Scrapbook File	Jun 27 84	1K	ZSYS	MACS	4	Mac 4	
Scrapbook File	Oct 27 84	1K	ZSYS	MACS	6	Mac 6	
Scrapbook File	Oct 19 40	9K	ZSYS	MACS	8	Mac 8	
Scrapbook File	Jun 16 84	8K	ZSYS	MACS	5	Mac 5	
Screen Maker	May 23 84	6K	APPL	RMKR	8	Mac 8	
Screen Maker	Apr 27 84	6K	APPL	RMKR	10	Mac 10	
Shapmakr.bas	May 28 84	3K	MSBA	MSBA	1	Mac 1	
Snd4t.bas	May 22 84	10K	MSBA	MSBA	1	Mac 1	
Snd4t.bas	May 22 84	10K	MSBA	MSBA	9	Mac 9	
Snd4t.bas	Oct 27 84	4K	MSBA	MSBA	12	Mac 12	
Snd4t.lar	May 29 84	2K	MSBA	MSBA	1	Mac 1	
Snd4t.min	May 29 84	2K	MSBA	MSBA	1	Mac 1	
Snd4t.min	Jul 25 84	2K	MSBA	MSBA	12	Mac 12	
Sndff.bas	May 22 84	4K	MSBA	MSBA	1	Mac 1	
Sndff.bas	May 22 84	4K	MSBA	MSBA	9	Mac 9	
Sndsw.bas	May 22 84	7K	MSBA	MSBA	1	Mac 1	
Sndsw.bas	May 22 84	7K	MSBA	MSBA	9	Mac 9	
Sndsw.bas	Jul 25 84	7K	MSBA	MSBA	12	Mac 12	
Sndsw.lei	Jul 25 84	2K	MSBA	MSBA	12	Mac 12	
Song.start	Jun 5 84	1K	MSBB	MSBA	9	Mac 9	
Spirol.bas	Mar 9 84	1K	MSBB	MSBA	1	Mac 1	
Spirograph	Mar 12 84	1K	MSBB	MSBA	1	Mac 1	
Spirotest	Mar 10 84	1K	MSBB	MSBA	1	Mac 1	

File Name	Date	Size	Type	Orig	VNum	Volume (Diskette)	Name
Sref.bas	Jul 25 84	6K	MSBA	MSBA	12	Mac	12
Star song	Jun 5 84	15K	MSBB	MSBA	9	Mac	9
Start mouse.term	Jun 5 84	1K	MSBB	MSBA	9	Mac	9
StartupScreen	Nov 24 28	22K	SCRN	NONE	8	Mac	8
StartupScreen	Aug 6 84	22K	SCRN	NONE	10	Mac	10
String.doc	Jul 25 84	1K	MSBA	MSBA	12	Mac	12
System	Aug 8 84	80K	ZSYS	MACS	2	Mac	2
System	Jul 27 84	79K	ZSYS	MACS	3	Mac	3
System	Jun 13 84	137K	ZSYS	MACS	4	Mac	4
System	May 2 84	154K	ZSYS	MACS	8	Mac	8
System	May 2 84	133K	ZSYS	MACS	10	Mac	10
System	Aug 16 84	147K	ZSYS	MACS	11	Mac	11
System	Jul 18 84	99K	ZSYS	MACS	5	Mac	5
Term 5.1.84	Apr 12 84	11K	MSBB	MSBA	1	Mac	1
Tobls.bas	Jul 25 84	9K	MSBA	MSBA	12	Mac	12
Trim.bas	Jul 25 84	3K	MSBA	MSBA	12	Mac	12
UIDemo	Feb 6 40	21K	APPL	????	10	Mac	10
Uncle/editnew	Jul 26 84	6K	APPL	????	4	Mac	4
Update Catalog	Aug 5 84	13K	MSBA	MSBA	2	Mac	2
User's Guide	Aug 5 84	5K	WORD	MACA	6	Mac	6
Video Bd.Parts List	Feb 11 40	13K	PNTG	MPNT	10	Mac	10
Video Bd.Schmatic	Feb 11 40	25K	PNTG	MPNT	10	Mac	10
Video.Bd.Installation	Aug 7 84	17K	PNTG	MPNT	10	Mac	10
Work.File	Nov 3 84	3K		DAS	3	Mac	3

XA4 Name	Macintosh Name	Usage
CATDSK.DOC	Catalogger Doc	Documentation for Catalogger
CATDSK.BAS	Catalogger	Startup program
CATUPD.BAS	Update Catalog	Disk file update program
CATLST.BAS	List Catalog	Disk file list program

Installation:

Create a Startup disk with System and Finder. Imagewriter and other system files aren't needed. Use Font Mover to remove all fonts except the system fonts and Monaco 9. Copy the three Catalogger program files to this disk. Copy Microsoft BASIC Version 1.01 to the disk. If you have a two drive system, modify things as required.

Operation: Creating updating Catalog:

Run "Catalogger" by double-clicking from the Finder or Opening and running from MS-BASIC.

At the Update/List/Quit prompt, respond with "U".

At the Add/Delete/List/Quit prompt, respond with "A".

At each Volume Number? prompt, eject the internal disk with CMD-Shift-1, insert the disk to be cataloged, and type its Volume Number and <Return>. The program reads the disk's directory into RAM, and repeats the Volume Number? prompt. If RAM is full, the program creates or updates the disk catalog

automatically. When you have no more disks to be catalogged, respond to the prompt <Return> only; the program reissues the Add/Delete/List/Quit prompt.

To Delete Volume(s), respond "D" to the Add/Delete/List/Quit prompt. The program issues a Volume Number? prompt. Type in the Volume Number of the disk to be deleted, and <Return>. The program repeats the Volume Number? prompt. When you have no more disks to be deleted, respond to the prompt with <Return> only; the program reissues the Add/Delete/List/Quit prompt.

If you Quit or List from the Add/Delete/List/Quit prompt, the program creates or updates the disk catalog (if necessary) before handling your request.

Operation: Listing the Catalog:

Run "Catalogger" from the Finder or BASIC.

At the Update/List/Quit prompt, respond with "L".

At the Output to ... prompt, respond with "S", "P", or "F". If you type "F", respond to the File Name? prompt with a file or device name and <Return>.

At the Full Volume ... prompt, respond with "Y" if you want a numeric listing of Volumes to precede the File listing; "N" if you don't.

At the Range of File Names ... prompt, respond with <Return> if you want to see all files, or a-b and <Return> (for example) if you want to see only those files whose names begin with "a" or "b".

Your listing is displayed, printed, etc. If output is to the screen, you are prompted each page for instructions: respond "Y" if you want more, or "N" if you don't. Similarly, respond to any Press any Key ... prompt.

After output, the program reissues the Update/List/Quit prompt; handle it as you wish.

REPRINT ACKNOWLEDGEMENTS

The following articles have been reprinted from other publications

The Brain Surgeon, Loyal Ontario Group Interested in Computers, Ontario, Canada, Maple Orchard Vol 4, No.1

Profiler, River City Apple Corps, The Apple-Dillo, Austin, Texas, July 1984.

Daisy Professional Statistical Package for the Apple, The River City Apple Corps, The Apple-Dillo, Austin, Texas, July, 1984.

Simply Perfect, River City Apple Corps, The Apple-Dillo, Austin Texas, June 1984.

Lexicom 3.0, River City Apple Corps, The Apple-Dillo, Austin Texas, June 1984

16 Bit CPU for Apple, Denver Apple Pi, Vol 6, No. 10, Oct 1984.

MAC SOFTWARE

(mail orders)

AS OF OCT. 84

	Mac Connect 1-800 Mac USA	Telsoft 1-800 MAC 000	Bulfinch Line 1-800 343-0700	P.C. Network 202-722-1233	Conroy & Co. 800 547-1129	Nontron 415-237-5257
1st Base	109	119	139.88			
Habodex	119	125	139.88			155
Davinci (3)	34	35	39.88			40
Sales Edge	169		179.88	188		
Think Tank	85	85	139.88			116
Mac Pic (2+2)	35		39.88			40
Megafiler	139	119				
Megamerge	86	79	89.88			
M.S. Basic	99	99	109.88		99	120
• Chart	89	81	89.88		94	100
• Multiphan	129	125	139.88		145	155
Mac The Knife	27	29	29.88			32
Dollars & Sense	84	99	114.88	90-97.20		120
PFS File & Report	85		89.88	117-126	94	
• File & Report	147	120	139.88		145	155
Click Art	35	32	39.88			40
Filerision	139	129	139.88			155
Helix		249	279.88			315
Main Street Filer		155	179.88			150
Home Accountant		59	79.88		75	120
M.S. File			139.88		145	
Omnis 2			139.88			
GAMES						
Millionaire	39	38	44.88		45	48
Mac Slots	54	49	54.88			62
Infocom	27-39					40-47
Mouse Stampede	23	25				32
Pensate or Fantasyman	24	25	29.88			32
Forbidden Quest	27					
Fun for the Money	32		39.88			40
Frogger	27		29.88	24-26		
Mac Manager			39.88			
Payment	YISA MC.	AE Visa MC.	MC. V. AC. O.			
Shipping	\$3 UBAir.	UPS	8/5day	INSUR #75		\$3
			\$2.50			

VOLUME BUYING CO-ORDINATORS

Bill Noonan and Ken Anson have agreed to co-ordinate volume buys. They will find out the prices for the products that the members request. Any vendor can bid to supply products. The co-ordinators will collect the names and the money to make the bulk buy. The vendor will separately bill each person in the bulk purchase and collect the appropriate sales tax as part of the transaction. NIAUG will not be involved directly in the transaction. It will however assist the co-ordinators in their efforts to provide a service to the Users. The Co-ordinators will decide what will be bought and the quantity of any product that must be bought to qualify as a volume buy. This number will likely be 5 to 10 but has not been decided.

Any one is free to suggest products that they would like to buy on this plan.

Bill Noonan can be reached at 262-6599, and Don Anson at 386-3640 H and 269-7513 W. Give them a call if you have suggestions or questions.

LET YOUR APPLE EARN \$\$\$\$

*If you've received our
letter and haven't
acted yet...*

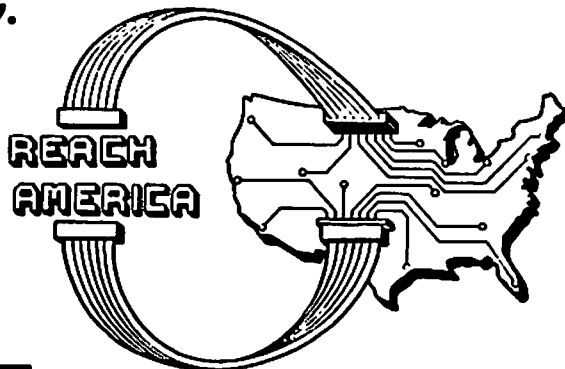
NOW is the time

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And turn *your*
Apple into a
Money-Making Machine*

*Don't let this opportunity
pass you by.*

For further
information,
Call Allan at
259-0810



*Offer is open until quota is reached.

INDUSTRY NEWS

Eye On the Industry....

by Al Guthrie

The good news is that the Big Mac (512k) is here ahead of schedule. The bad news is, it will cost the early Mac buyers about \$1K to upgrade.

About 12% of Mac's sales have been to the big corporations. The home market accounts for 21%, professionals 20%, small business 17%.

The Apple laser printer, due out someday, will use the same Canon mechanism used by Hewlett-Packard, and will have a very large memory.

Acorn Computer has been threatening to cut into Apples education market for some time now. So when Apple dropped its independent reps, Acorn picked them up.

AT&T's main selling feature seems to be that it is not IBM. Some feel that is enough.

The AT&T PC is really an Olivetti, which is 25% AT&T owned. Meanwhile, Convergent Technologies is working on a voice/data workstation for AT&T. All part of the game of "catch IBM."

Strictly Rumors . . .

Lisa may be disconnected from its life support systems after the first of the year. The funeral will be for family only.

A price drop in the Mac in time to push Christmas sales is expected. Further price cutting by the discounters may drive the 128K Mac as low as \$1500.

Regardless of what Apple may do about the price of the Mac, it is clearly selling for less than list. Or did you buy yours too soon?

The Fat Mac may get fatter, maybe going to \$800K.

The PCjr will eventually wind up on Kmart shelves with the rest of the toys.

rumors continue that TI will abandon the retail computer market before another year is out.

All of the above have been denied or ignored by the named parties.

See You All In Court . . .

Apple vs Peachtree: for failure to provide accounting programs for the Apple III despite receiving Apple development money. Peachtree is up for sale.

Management & Computer Services, Inc. vs Apple for trademark violation (Mac); they haven't sued the Big Mac under the arches yet.

Apple vs Microcom of Canada: for selling a \$525-a-copy (emphasize copy) machine; under Canadian law, ROM is not subject to copyright, but Apple hopes to set a precedent, as they did in Australia.

Apple vs Others in Hong Kong, England and Italy: similar grounds.

Apple vs the Alleged Bad Guys: Apple hired a private eye to buy counterfeit Apples, and subsequently got a grand jury indictment against two men building the computers in a garage.

Computerland vs Fortune Systems: for fraud and breach of contract, delivering computers that didn't live up to the claims.

A supplier vs Convergent Technologies: for failure to pay for components of the Workslate; Convergent says the parts were defective. The Workslate was recently discontinued on the not unreasonable grounds that nobody wanted to buy it.

The Feds vs DEC: fined \$1 million for export violations that allowed computers to go to Soviet bloc through a third party.

Stockholders vs Kaypro: for falsifying its financial and inventory position at the time it issued the stock.

Lotus vs a hospital service company: for buying Lotus 1-2-3 and distributing copies; settled out of court when Defendant destroyed the copies and fired the employees responsible.

Ex-director of development vs Ovation: for improper termination, and offering less for his stock than he thought it was worth; settled out of court when the stock became worth even less. Ovation alleged he was fired for incompetence and is to blame for their failure to deliver on time.

Dept. of Defense vs TI: for delivering millions of chips for weapons systems without inspecting them; Criminal charges are possible.

Stockholders vs TI: for failing to disclose an expected loss when the TI 99 was dropped.

Read All About It . . . Maybe.

The next magazines to fold will be Hot CoCo and 80 Micro. If you subscribed to the defunct magazine, Softtalk, you are now a subscriber to A+, like it or not.

How The Empire Disturbs The Force.

IBM is getting ready for another round of price cuts. When that happens, the clone-makers will be in serious trouble and the used PC market will begin to grow.

Last time they cut prices the dealers got 6 weeks of price protection. High volume dealers forecast sales further ahead than that and some of them got burned.

IBM has penetrated about 3% of the education market and is pushing to overcome Apples lead (67%). The first move is to lend 1500 PCjr's to the National Computer Training Institute to use in training teachers.

IBM is also entering the software market in a big way, which means a number of the third party developers are going to be forced out of business. IBM software, like Topview, uses much memory. If you've ever dealt with IBM in its role as large-computer manufacturer you will recognize the strategy. Sell the customer software that is complicated enough to degrade system performance, then sell him more hardware to make up for it.

Life On The Street Is Hard.

CDC has closed 10 more stores, leaving them with 8 out of the original 120. None of the survivors are in the Chicago area.

Joining the Crowd...

Tandy says if you can't beat 'em.... The new Radio Shack product is IBM PC XT compatible, but costs about \$1400 less.

Chapter 11. . . Or Worse.

Just so you don't think all the bad news is in the personal computer market, Beehive, a firm that has been making computer terminals forever, is in Chapt. 11. Continental Illinois called its loan. At an inopportune time. Like when Beehive needed the money.

Bytec, maker of the Hyperion, has ceased

operations, citing an inability to compete with IBM and Apple. The Hyperion was given the final push when Compaq dropped its price.

Business Solutions Inc., producer of Incredible Jack, the integrated package for the Apple IIe, is going out of business. The package sold well, but they spent all their money on promoting the IBM version, jack 2.

Franklin's work force is down to 70. Under its reorganization plan it will drop back to 30 people, and cease to be a manufacturing company. No one will say what they will do instead.

Gavilan is out of business and its investors are out \$30 million.

The heavily advertised software company, Knoware, is now nowhere. They filed for liquidation and turned the business over to an answering machine.

Osborne will have a series of auctions to get rid of the Executive models cluttering up the warehouse. They've come out of Chapt. 11 as a slimmed-down company (35 employees, down from 1000) that sells machines made by others, with an Osborne nameplate. A stock offering will be limited to California residents, who have been known to buy pieces of string from the Rev. Ike. The first product out of the new company will be the Vixen, (\$1298) with a 280A, hard disk, and bundled software. They also have an IBM compatible called Encore.

Otrona, manufacturer of transportable computers, has called it quits, in spite of a backlog of orders. They ran out of money when banks and parts vendors got suspicious of the entire computer business and withheld credit.

Ovation, which has missed each of the announced dates for release of its windowing software, has ceased operation. They are looking for someone to buy them out.

Softwaire Centre International, after filing Chapt. 11, has been taken over by Wayne Green. At least 30 would-be store owners paid franchise deposits but have been stopped from opening for business by the bankruptcy filing. An earlier rescue attempt by George Tate,

co-founder of Ashton-Tate, fell through when he died. Now a majority of the franchise store owners are threatening legal action against Green and may become independents. Among other things, they charge that they get very little service in return for their franchise fee.

. . . And Counting?

Ashton-Tate had a big winner with dBase II, but things have not been going well lately. They seem to be selling more and enjoying it less, as 2nd quarter revenue rose and profits dropped. Management says that's because of high advertising costs and research and development.

Centronics, Once the standard for personal computer printers, has had only 2 profitable quarters in the last three years, and this isn't one of them. They are moving assembly work to South Korea and Taiwan.

Columbia, which had originally announced a \$1.5 million 2nd quarter profit and then revised the numbers to show a \$2.5 million loss, has revised the numbers again. Now it's a \$3.5 million loss. Their financial officer resigned.

Commodore is planning to introduce 16- and 32-bit machines next year through mass market channels like Kmart. Get ready for another price war. Sales are down 30% from last year.

Compaq's new desktop model will not get shelf space in Sears or Compushop stores. A number of other stores that carry the Compaq transportable have also turned thumbs down. Meanwhile, Compaq doubled its sales and made less money this quarter. In case you've wondered how that's done, here's the secret: Send your spare cash to an advertising agency.

Christmas may be the Coleco Adam's last shot. Coleco is adding a modem and disk drive this time around.

Cromemco has laid off a number of workers in an "efficiency move."

Eagle reported a \$17 million loss in the 4th quarter. They are closing down corporate headquarters and moving to their manufacturing plant to save rent. The President/CEO is stepping down, and the staff (once at 300) has been cut to 65. How much longer before the end?

D.C. Hayes, the granddaddy of the Apple modem manufacturers, is not immune. They laid off 80 production workers.

ITT, unable to sell the Xtra as an IBM clone, is having the usual management storm signals. People leaving or about to leave, reports of 'philosophical differences' between top management people. Now ITT is offering a \$700 rebate on the Xtra.

Kaypro has dropped the price of the Kaypro 2 with a double-sided drive, including Wordstar and MBasic to under \$1K to improve sales. The Robie, their newest model, has been a flop. Shipments began last spring and production was halted in July because of drive problems. The company claims that's all fixed now.

As if that wasn't enough, an audit has shown that up to \$7 million in parts may have been stolen. Due to a shortage of space the components were kept in a circus tent. One dealer has dropped Kaypro, alleging he has been unable to get parts for servicing since August.

Leading Edge has reduced the price of its IBM clone for the second time in less than six months, and has postponed a planned ad campaign.

Micropro, the Wordstar developer, reported a 4th quarter loss and promptly fired 10% of the workforce. This was the latest of several layoffs that total 150 so far. They have also reduced the price of all versions of Wordstar. Development projects unrelated to wordprocessing software have been dropped and a new version of Wordstar is expected out soon.

NIAUG offers its members a hotline for Apple problems for \$24 a year. TI is offering the same service to its customers for \$250 a year.

Spectravideo has been bought by a Hong Kong firm.

Televideo has had an income decrease of 25% this year. Their executive VP has resigned.

For What It's Worth Dept.

A recent ad in the German edition of Cosmopolitan featured full-frontal male nudity in an attempt to market Commodore computers to women. There are no plans to bring the ad campaign to the U. S.

Interesting Bits

by Chris Tufts

Jensen Engineering, Inc., has announced two newly-developed universal acoustical printer enclosures. The two models fit most printers used with personal computers. Prices are \$149 and \$169. For more information, write Jensen Engineering, P.O. Box 7446, Santa Rosa CA 95407 or call 800-358-8272.

A newly developed curriculum designed to guide the study of computer systems and their uses for high school students has been released by the Data Processing Management Association. Copies of the curriculum are available from Data Processing Management Association, Attn: Hildegard Klemm, Manager of Educational Services, 505 Busse Highway, Park Ridge IL 60068-3191.

Interactive Microware, Inc. (IMI) has announced "REMTROL," a high-power relay controller that lets an Apple II computer and IMI's ADALAB Data Acquisition Interface Card control four or eight AC loads of 20 amps at up to 277 VAC. The 4-channel PR4 and 8-channel PR8 units offer increased capabilities compared to other solid-state power relay modules, which can handle only modest AC or DC loads of up to 3 amps. Typical REMTROL applications include control of heavy-duty motors, fans, heaters, pumps, valves and other process or environmental control equipment. IMI's easy-to-use QUICKI/O extended BASIC software controls the ADALAB Interface Card, which activates the REMTROL relays. Key REMTROL features include ADALAB Interface control lines that are isolated both electrically and mechanically from REMTROL's high voltage relay connections, power relay sequencing that eliminates large power line surges by waiting 125 msec between relay closures, and manual override switches that ensure safe and easy testing, set-up and relay maintenance. The REMTROL 4-channel PR-4 unit is available for \$375. The 8-channel PR8 version is offered for \$475. ADALAB and QUICKI/O are available separately for \$495. All prices include documentation. For further information, write Interactive Microware, Inc., P.O. Box 139, State College, Pa 16804-0139 or call 814-238-8294.

Electronic Courseware Systems, Inc., has published a series of new music programs for the Apple II+ and IIe computers entitled "Patterns in Rhythm." Patterns in Rhythm is a four section program designed to allow

students to compose simple and compound meters. The computer will display music notation and play the rhythm designed by the user. A quiz section of the program is designed to teach rhythm dictation in simple and compound time with student scores retained and available with computer printouts. Hard copy of Instructor Reports for each lesson are generated on a printer. The cost of this lesson series for the Apple II+ or IIe (48K, one disk drive) is \$39.95. Educational discounts are available to schools for multi-copy purchases. Write to Electronic Courseware Systems, Inc., 309 Windsor Road, Champaign, IL 61820 or call (217) 359-7099, for additional information or complete software catalog.

Arrays, Inc./Continental Software is now shipping "The Home Accountant Expanded" for the Apple IIc and IIe, a completely rewritten version of the firm's best-selling "The Home Accountant". "The Home Accountant Expanded" has been specifically redeveloped for the Apple IIc and additionally may be used with the 128K Apple IIe system. The new program offers the same functions as earlier versions for the Apple IIe with the new features specifically tailored to the IIc's capabilities. Key new features include 80-column capability, ProDos format for much faster operation, use of the mouse, and other functions. "The Home Accountant Expanded" carries a suggested retail price of \$74.95.

Wico Corporation, a leading designer and manufacturer of trackball and joystick control devices announced "SmartBoard", an intelligent keyboard/trackball peripheral for the IBM PC and Apple II, II+ and IIe computer systems. Although occupying no more work space than the average keyboard, the SmartBoard incorporates a trackball capable of all standard trackball commands and mouse emulation. The SmartBoard is fully user programmable allocating 256 bytes to the ten horizontally positioned function keys according to need. Any single function key can be programmed to contain as much as 126 characters of information, including all alphabet characters, control characters, and spaces and returns. The trackball can be programmed with up to eight characters in any of the four primary directions and provides two banks of memory for this purpose. All user programming is stored in the SmartBoard with a three penlight cell battery backup system. The keyboard come factory programmed with both the standard QWERTY and DVORAK layouts, and with the trackball set to

up/down, left/right cursor control. A BASIC key provides Apple users 26 BASIC commands at their fingertips. A Key Swap feature permits an instant exchange among pairs of keys to aid in mouse emulation or for clustering frequently used control keys together. In addition, a electronic key-click, type ahead buffer, and auto repeat function may be toggled on or off via a DIP switch mounted beneath the unit. A serial expansion port has been provided to enable additional controller devices to be connected to or through the SmartBoard, or to allow several users to access the same host computer. Apple owners will have to purchase an adaptor for an additional \$50 to use the port. The 4K ROM chip is user accessible for upgrades through a sliding panel underneath the unit. The suggested retail price for the SmartBoard is \$399.95.

MISCELLANEOUS FEATURES

To E or not][e.....

To E or not][e, that is the question.

I first purchased my Apple, oh my, over 5 years ago. This was back just before the introduction of the][+. I was the proud owner of an Apple][with 48K of memory (I splurged. I could see that I would eventually want more memory). Integer only. I was lucky in that Apple had just changed their keyboard over to the 'Control-Reset' type.

It had one of those OLD mother boards, the ones with the 16K configuration blocks. These old mother boards had some advantages. Apple had set up an area for the home-brew experimenter right on the board. "Lower case?" you ask. "What's that? Not on MY computer you don't!" I respond. Paddles; remember paddles?

When I bought my system, disk drives were still unusual! My how times change. For over 2 months I suffered with cassette tapes. Boy, what an ordeal. Needless to say, as soon as I could save up some money, a lone disk drive was ordered. No 'off the shelf stock' in those days. Within about 3 weeks, the drive arrived, and now started the real adventure.

I bought disks for this, and disks for that. \$5.00 or so for a blank disk was the store price so I bought NIAUG program disks just because they were cheaper than blank disks in the stores! I bought commercial software for a dozen applications. I bought an amazing number of games, full price, too! I am shocked at the number now, flipping back thru these old remnants of a by-gone era. My pack-rat instinct prevents me from turning these disks into blanks, so I just keep on buying more and more disks. I must have over 300 disks, yet I only use about 10 programs, and 10 data disks.

In that first year I also purchased a modem. The system needs to be able to tell the time. I just had to have a printer! Single drive copies were SO TIME CONSUMING. I started a 'professional' bulletin board, which I ran for over 3 years. It never really went anywhere. but I enjoyed it, and many of the regular callers liked the concept. I had a few complaints about the electric bills from the wife.

Over the years, the slots just seemed to fill up. An Applesoft card. A 16K language card. Lower-case display on the screen. Lower-case directly from the keyboard. A 128K memory board. A 256K Ram disk card. A new printer controller. Serial interface. Track-ball. Mouse. Several different joy-sticks. Programs to use all this new and exciting hardware! DOS 3.3 and the DOS switch. Somewhere in there, my Apple][changed into a][+.

All in all, an exciting time. I made some money with my computer (which bumped me into another tax bracket !@#*!). The club was growing, and I was becoming more involved. Apple brought out the ///. A screwed up system, incompatible with the][family. But for business, maybe.....

Atari came, flashed and settled into a mediocre existence. Devout followers, just as ardent as anyone with a][. The PET, except for schools, was laughed from the market. A calculator keyboard, really? They weren't kidding, but we were the ones laughing. TI. They were inept at the very least. They had an incredible demand when the price was \$50.00 and you couldn't buy them. Then

TI had a laugh and announced they had abolished the product and all support for it!

Old, unsupported hardware still has a useful purpose. BOAT ANCHORS.

Radio Shack. A long time contender. Almost as screwed up as Apple. They lost most of their market when IBM decided there really was money in personnel computers. IBM. They came in with a bang, and chewed up the market. Even Apple was worried.

Here comes LISA. Rumors abound. Excitement is high. We secretly hope, and comment to ourselves, "Surely Apple learned from their mistakes with the ///." But NO!!! "Expansion?" we ask. "I hope those funny disks are a joke." "They're not?! GIVE ME STRENGTH." "How much does it cost?" "HA HA HA HA HA HA HA." "Cut the price in half, and MAYBE you'll be able to sell them."

IBM is still chewing out its hunk of the market. LISA just sits there. The /// lc ses ground rapidly. Why are the][s still selling? Apple decides, "We better upgrade the][. We need some of the expansion/add-on market." Here comes the][e. "Compatible?" we ask. "Well, ALMOST, and we aren't making the][+ anymore, so there!" If not for the][family, Apple would have never been able to screw up the ///, and LISA and still be around to try it's hand a messing up again.

When the][e first came out I looked closely at the system, and concluded that there was no reason for me to upgrade. At the time there were many rumors of the new computer which Apple had in the works. I decided to wait and see. It was a very long wait.

Finally, with much fanfare and excitement, Apple announced MACINTOSH. Neat system, but did Apple learn from past mistakes. No, not really. There is no expansion in a Mac. In the beginning, there was only 1 disk drive. Other than the supplied programs from Apple, there was nothing else available in the way of software. Even the][s came with Basic, but not MAC! Did the MAC use standard disk media. No. Did they adopt a

standard disk interface. No (they modified the][s methods). Were disks exchangeable with other systems? YES, but only with Apple's own LISA. They had to do this; you had to have a LISA in order to write any programs to take to the MAC.

I like the MAC. It is a very nice machine, BUT before I buy one, Apple will have to solve a number of my perceived problems with the system. They have got to have double-sided disks (and I hope more storage than just double what they can get on a disk now). MUCH more memory (512K is now available, but 2 meg would be great). COLOR graphics. (Color is designed into the MAC, it is just not supported right now due to the lack of memory, and a color monitor in the MAC. Cost is the obvious reason for this delay.) Lots of programs. Apple keeps talking about all the programs that are being developed for the MAC, but talk is cheap. What can I buy, TODAY. I grant you that the number of programs that are available has grown considerably, but I want INEXPENSIVE programs. I don't have \$200 to drop on every program.

My][was my old stand-by. It got a lot of use. It was always dependable (2 power supplies were my only real problems). Then over the last several months it seemed to develop amnesia. Sometimes I would turn it on and nothing would happen. No beep, no 'APPLE][', no disk spinning. The old standard remedy for this is to power off, and smash all the chips, then try again. It always seemed to work. It just wanted some attention. Problems on power up were bothersome, but then it started lose its mind in the middle of a letter, or program, or after I had written a bunch of code. That was all I could stand, "and I can't's stands no more!" as Popeye would say. It was time to upgrade to a new computer.

But what kind of computer. Only a handful are even worth considering anymore. An IBM? Nah. There is one a work that I have access to. I was amazed to see that my OLD][was faster then the NEW IBM. Hard disks don't count, I can't afford one. TRS 80? I have always called them TRASH 80. First impressions last. Atari? I'm not into games anymore. Commodore? My desk is messy

enough; I want something I can upgrade on the inside, not hang out the back. MACINTOSH. No; for reasons listed previously. APPLE][c. Where is the expansion. It's about as portable as my old][. It's not even compatible with the][e. "Almost compatible" but you know where 'almost' counts, and its not in computers!

IBM is for the business people (only because of the IBM NAME). Most of the programs were just converted from CPM. I would bet that, even now, there is more original programming on the][then on the IBM. And if I couldn't afford \$200 programs for the MAC, I certainly can't afford \$400 programs for the IBM.

Why buy an Atari when you can get an Apple for about the same \$. Why spend the money on an Atari, when you can get the same functions on a Commodore 64? The Commodore is for people who can't afford an Apple][.

The only system left is a][e. Its got upper and lower case, both on the screen and from the keyboard. It comes with an 80 column card and a monitor. Double HI-RES graphics (I think of my Apple whenever I see HIRES rootbeer). 128K of memory, but there are technicalities with using the extra 64K. True inverse video. A full keyboard. No more hunting around for the special keystrokes to get those funny characters. The][e still has 7 out of the]['s 8 expansion slots. The 8th slot is reserved for the Apple 80 Column card with an extra 64K of memory. RGB Color output is EASY on the][e; slot 7 is set up for this very purpose. AND, also, most if not all of my program library is usable AS IS on the][e. Those 300 disks made the difference.][e here I come.

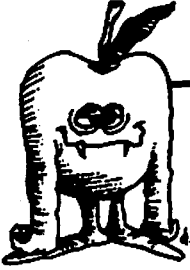
I sold my][+ with 2 drives, printer, modem, joysticks, 16K card, and miscellaneous other hardware and software for \$1200, \$300 less than I wanted. I turned around and bought a][e with 2 drives, monitor, and 64K-80 column card for \$1200. I got a deal, and at the time][e's were cheap. Apple thought that the][c would take over the][e's position in the market. WRONG! It's a nice little machine, but its TOO portable for schools and libraries, and not portable enough

for many of the other people. Also, it is my opinion that, most people buy the][e just because of its flexibility. Those expansion slots mean the difference between having to buy a new computer, or just adding a card! The schools like this expandability also, and for the same reason.

Apple recently raised the price of the][e back to the old level. I hear that they have a current production backlog on][e's of over 1 year (this is from an UN-reliable source, but where there is smoke.....). Regarding the price, I also learned the hard way that Apple no longer includes all those 'extra' technical manuals with the system. Another \$100 spent for these books. Some people won't want them for that price, but I came to depend on my old][reference manuals, and having those books on my shelf was worth the price.

Now for some more intangible reasons to justify my upgrade. (IE rumors, hopes, desires, fantasies, opinions and assorted other worthless information.) ProDos is now available for the Apple][family. A rather worthless program in many respects, not at all as friendly as DOS 3.3. Apple should realize that a really GOOD operating system would sell more systems than a bad one. Of course, we all know how Apple feels about the 'suckers' (my phrase for their attitudes) who have already bought an Apple product. If they were concerned, they wouldn't price a new expansion to an old system in such a way as to make it cheaper if the customer had waited to buy a new machine (FAT Mac upgrades). The same price would be ok, but a little discount would be better! Apple doesn't want to support existing users. They have no understanding of the number of people who would buy an Apple product, because of the name, over another product. Nothing like IBM you understand, but Apple DOES have a name, especially with existing owners. I'd bet there are 100,000 Apples, just within 100 miles of the Chicago Loop! There are a lot of US out there.

Woz and Jobs always said, years ago, that the people who had purchased Apple computers were the people who had made Apple Computer, and they (the Apple owner) would not be forgotten when Apple



northern illinois apple users group

1271 West Dundee Road, Buffalo Grove, IL. 60090

MEMBERSHIP APPLICATION

NOTE: Information obtained from this application is solely for the use of the NORTHERN ILLINOIS APPLE USERS GROUP (NIAUG). Membership lists will not be distributed to members or non-members.

PLEASE PRINT

☐ Full Membership (\$29.00) Includes \$24.00 Annual dues + \$5.00 initiation fee. Covers entire family; 1 Vote; all privileges. This rate applies to the following counties: ILLINOIS - Boone, Cook, DeKalb, DuPage, Grundy, Kane, Kankakee, Kendall, Lake, LaSalle, Lee, McHenry, Ogle, Will, Winnebago; INDIANA - Lake, Porter; WISCONSIN - Jefferson, Milwaukee, Racine, Rock, Walworth, and Waukesha.

☐ Associate Membership (\$23.00) Includes \$18.00 Annual dues + \$5.00 initiation fee. Covers entire family; No Vote; all privileges. This rate applies only to those persons living outside the above mentioned counties.

NOTE: Full or Associate memberships are for 12 Months, starting the month they are received.

☐ Additional Harvest Subscription (\$12.00). \$12.00 annual fee, prorated to the number of months left on the Full or Associate membership. Covers one person; No Vote. (Must be a member of a family who have already paid for a Full or Associate Membership.)

NAME _____ PHONE (____) _____-

ADDRESS _____ COUNTY _____

CITY _____ STATE _____ ZIP _____-

If this is an application for an additional Harvest subscription, please fill in the following with the information about the Full or Associate membership.

NAME _____ PHONE (____) _____-

ADDRESS _____ COUNTY _____

CITY _____ STATE _____ ZIP _____-

Would you please take a few moments of your time to fill out the following information. This information will help us to get a better picture of what the needs of our Users really are.

Please check the type of computer(s) you have or are using.

☐ APPLE II ☐ APPLE II+ ☐ APPLE IIe ☐ APPLE /// ☐ LISA

☐ MACINTOSH ☐ APPLE COMPATIBLE ☐ OTHER _____

Benefits the group can provide for you _____

Benefits you would like to provide to the group _____

Comments _____

TREASURER'S USE ONLY Do not write below this line!

Cash ☐ Amount \$ _____ Check ☐ # _____ Date ____-____-____

Refund of overpayment: Check # _____ Amount \$ _____ Initials _____

offered stock to the public. You know how many shares we were offered. 0 Zip Nada Niet None. I'm still upset! Not because I REALLY expected anything, I just don't like the attitude! I should not expect it to change. Who does Apple think made its market share in sales.

If they looked at the reasons, I would bet they were something like this:

Amount of software available.

Amount of things I can do with the basic machine.

Number of other users I know personally.

How much help can I get, from where and how much will it cost?

How easy is it to add new functions in hardware, new technology?

And finally, how much will it cost?

When you boil it all down, more Apple computers are sold because an existing owner talked to a friend, answered his questions, showed him HIS machine, and gave him an idea what was really involved in owning and using a computer, then because of all their Madison Avenue advertising hype! Surprise me Apple. Read this and pay attention. CHANGE. BE A LEADER, don't follow one!

Apple produces][c's in an automated factory. Machines are cheap labor.][e's have a large amount of people labor. Until, or unless, Apple gets a][e automated factory up and running, all Apple seems to want to do is kill the][e. Apple did kill the Apple ///. But for some reason, it just won't die. Some stores I talk to can't sell the last of the ///'s they still have, yet other stores sell them like hotcakes, and can't get enough. They could sell as many as they can get in. (Of course, these are salesmen talking, and I wouldn't necessarily trust anything they say. You did know that all the used car salesmen are now into selling new computers. At least it seems that way to me.)

Now, you say, "But those seem to me to be very good reasons to NOT by any Apple products!" Let me explain. There are too many Apple][computers out in the market now for Apple to go "down the tubes" unless they make a severe pricing blunder. (Knowing Apple, they could still do it!) MAC's are, I believe, the most friendly computer available, and will be for a long time to come. It is

not from Apple that I have hope for the][, or even the MAC. There are too many existing owners of these systems for the market to disappear. Face it, there are millions of]['s out there, and by now, probably hundreds of thousands of MAC's. These systems will be around for a long time. Probably longer than the normal life of "professional" computer systems. What does this mean to you or me? Simply this: Owners of these systems will demand new products, and enhancements. Either existing manufactures will supply the products to meet this demand; OR enterprising Apple owners will 'do it themselves' and market their work to the Apple owner directly.

We are starting to see this evolve. It will only accelerate. The days of the "\$200+" computer program are over. Companies that continue with these excessive prices will find their programs ignored or pirated.][owners want GOOD BUT INEXPENSIVE programs. MAC owners are the same, and they are quickly learning from the][owners that most of the prices being charged for current software is WORSE than Excessive. In my prejudiced opinion, the MOST EXPENSIVE PROGRAM for any computer SHOULD NOT COST MORE THAN \$89.00, and this is for a program with excellent documentation and support. Well so much for software, how about the hardware?

Regarding MAC hardware, I am not sufficiently up to date to talk intelligently on the subject. My opinions have been stated earlier.

What can the][owner expect. Well, we already have a mouse, available from Apple. PRO-DOS (ha-ha-ha-ha). Rumor has it that there will be a 512K][e upgrade in the future. From other people: Hard disk drives are finally now down below \$1000 for 10 Meg. Hi-capacity floppies are now available. One hi-capacity system will even read and write regular DOS 3.3 disks. 3.5 inch drives are now becoming available for the]['s as well, although not in the same writing method as MAC (I think, please correct me if I am wrong!). New processors are now available for the][. 68000. 68008. 65N02 with DOS 4.0 from an outside vendor. 65SC816, a true 16 bit processor compatible with existing 6502 machine code. This is exciting and heady stuff.

I believe Apple will succeed in spite of itself. We, the Apple owners will make this happen! If my old][+ can beat an IBM, just think what a][e with 512K, a hard disk, a large scale floppy, and the 65SC816 could do. That would turn into the next business computer, in spite of anything Apple could do, short of discontinuing][e production. Nah, they wouldn't do that, would they? Can they be that stupid? Based on past experience, maybe.....

To owners of old Apples: BUY, or UPGRADE to a][e now, while you still can, or be satisfied with your][and don't complain later about not being told to upgrade. Your old]['s will still be useful, but many of these new products may only work in a][e, or will cost more for the older]['s. Don't hold your breath for anything from Apple. The independent manufacturers and Apple hackers will be the ones to depend on. If we want this kind of software, WE MUST BE WILLING TO PAY FOR IT! Hardware costs can not be easily reduced, but Group Buys help in this area.

To those of you who can 'do it yourself': PLEASE DO IT. We are all anxiously awaiting your products. We will even help you to improve them, just ask. Don't be greedy and price them excessively, we won't buy. We know there is "no free lunch". If you don't make money, you won't develop the products. Just be fair with us, and we will be fair with you. Which would you rather have. Sell 250,000 programs at \$40.00, or 2,500 at \$200.00 with 50,000 pirated copies around. Any user with any brains doesn't use stolen software. It is not worth the risk, and what does he do when he has a problem. Any business man who uses pirated software deserves to lose his data. He will probably lose his business as well. (P.S. Try selling thru the users groups. Your portion of the revenue will be MUCH greater. Why pay several middle men?)

These are my opinions. They may have no bearing on the truth, and may be completely in error and false. BUYER BEWARE! But it makes sense to me.

Rob Stewart, CPD
President NIAUG

THE SAGA OF THE IGNORANT MACHINE

by Terry Tufts

I have this young machine that answers my telephone. As a machine goes, its a nice machine but it has lead a sheltered life and is ignorant about certain things. It must be ignorant otherwise why would it irritate my friends so they never leave me a message but take all the messages from salesmen who call me long distance and want me return their call?

Well it seems my machine has found friends. It may be ignorant but like most adolescents it still likes to carry on endless conversations on the phone. It seems one of its shiftless friends has been commissioned to carry out surveys and make sales calls. It calls my innocent machine, (I don't think its had an obscene call yet, I haven't warned it about salesmen) and makes it all sorts or promises if it will just co-operate. Well my naive and innocent machine is extremely impressionable and goes along with everything that is suggested. I know, because on its tape I hear it being asked all sorts of outrageous questions and also being thanked for its co-operation.

Could my sweet innocent machine be being led astray? I don't know what it has been saying to that other fast talking machine. My machine is very shy an retiring and it is those other "forward" machines that call at all hours of the day. How would you deal with such a problem? Is it becoming a juvenile delinquent? Perhaps it is a victim of early childhood experiences. Have I been too lenient? Is it a possible candidate for some counseling? Does anyone out there have any experience with this problem? Perhaps there is a Dear Abby of machines. Who would I call, perhaps the School of Robotics? Perhaps if we had a Hardware Special Interest group my problems would be solved.

Well if any of you can help please send me your suggestions, don't call because it might overhear us talking and that could make the problems worse. The problem seems to be getting worse and I am extremely concerned. Maybe it will go off the deep end and insult the salesmen who call and then I won't get any messages. What good would it be to have an answering machine if no one calls? Those beeps and blank spot on the tape just drive me crazy!

SEPTEMBER 11 PLANNING MEETING MINUTES

This months meeting started with Rob Stewart, Jim Glore, Joe Zeinz, Terry Tufts, Larry Erdman, Alan George, and Jim Murphy present.

Jim Glore covered next months meeting agenda which included a verbal list of many interesting possibilities.

Alan was asked if he or anyone in the Mac SIG would be willing to do a Mac program demo. Alan replied that he would ask the members at the next meeting and possibly either in the October or November general meeting this could be planned.

There was a discussion regarding the NIAUG bulletin board. It appears that there is some confusion as to both the posting of the NIAUG agenda and use in general of this system. One of the questions raised was whether or not the agenda is being released to the SYSOP for posting. This is one of the duties of the secretary (me) of the club. Due to family obligations I was not able to attend this planning meeting (am transcribing these minutes from a tape recording) but wish to respond, as the question was directed toward this office. I do not always have the luxury of time that getting into the bulletin board and uploading the agenda sometimes requires. Nonetheless I do forward a hard copy of the agenda, and have been doing so for the major portion of this year, to the SYSOP for posting. This is usually done either the week of the planning meeting or the one following at latest. It was decided that Rob would talk with Mr Alpert, the SYSOP, and attempt to clarify any problems either on our end or his.

Jim Glore informed all about the use of his new machine which is going to be used on a trial basis in the near future. This device systematically calls pre entered phone numbers and transmits a message to the person answering the phone. It also has the capability of recording a response from the recipient.

The November meeting agenda was next on the list. Besides the possibility of a Mac presentation, word processors were considered. This may include the pro's and con's that owners and users find when working with a particular system. Another idea was a demo on troubleshooting your apple hardware.

Our December agenda currently lists games and the program contest as a starting point.

A discussion on the awareness of our (NIAUG) existence followed. It seems as was stated that one must be quite resourceful to find out that we do exist and how to get in touch with us. Even the piece in the Sun Times just recently did not spur a terrific response. Curious as just how many of our own members found that article. It seems that Terry may have a volunteer to handle the mailing to the libraries in the area. Some of the dealers in the area are willing to help make our existence known by placing one of our info request post cards in each unit they sell. This in turn will take the load off of them by directing many user questions to us and allow dealers the time to take care of business. The latter profit is a profit to our entire group as we find that answering a question for one person in a group usually answers many.

Rob told of an offering by a company for a nice looking paperweight that could be inscribed with both the club logo and name. This could be a saleable item for a reasonable price. No definite decision was made but those present were asked to think about it.

Another idea was that of combining newsletter efforts with other small user groups in the Southern Wisconsin / Northern Illinois area. The thought was to eliminate the duplication of efforts that we know exist and reduce the overall cost of the publication for all groups. Advertising interest would most likely be enhanced due to the increased distribution. Jim Glore suggested that if Terry had the time and wished to pursue this he should proceed. This is more of a long term plan than a short term one.

Computerfest and our involvement was the following concern. Part of the problem with our low response was that we did not take membership applications at the show. That was agreed as a must next time.

With the unanimous approval of the by-laws the task of appointing directors is now a reality. Larry Erdman was asked and he accepted.

The question of who does not want to do next year what they were doing this year was next. Jim glore was concerned as program chairman that he was running out of ideas on topics but he was assured that he would get help. Joe Zeinz and Terry would like to see some new blood in their position if a serious person wished to take over.

OCTOBER 16 PLANNING MEETING MINUTES

Attending tonight's planning meeting were Rob Stewart, Allan George, Terry Tufts, Joe Zeinz, Paul Stadfeld, Jim Glore, Rich McNeil, George McClarity, Loren Avenson, Guy Lyle, Larry Erdman, Don L'Amoureux, Sky Findlay and Ken Rentfleish.

We started with the final planning of November's agenda which includes a product demonstration by Broderbond and a door prize giveaway drawing. Anderson Jacobson is also on with some products you will like. Suncom will also show some products from their line.

Seems that the Education SIG is on a low at the present time.

The two main topics for December are a Macintosh demo and the program contest. A vote of past December proceedings was that we would pass out a "goodie" but probably not see Santa Claus.

Jim Glore is planning on using his new calling device to remind us of the November, December and January meetings. The decision of the directors to pay Jim eight cents a call for these services was unanimous. The calls will be limited to the metro call pack.

Discussion of the appointed position of director shows Guy Lyle, Chris Otis, George McClarity, Larry Erdman, Paul Stadfeld, and Don L'Amoureux accepting, which now gives us a full board.

Jim Glore has a prize left over from last years program contest and is still attempting to contact the winner.

Rich McNeil was asked about volunteers and Jim responded that he would be in need of them.

Terry mentioned that we had a request to exchange disks with a college in Grand Rapids Michigan that is just getting a group started. Joe points out that we have sent out info packs to attempt to spark interest with other groups. What we don't want is trading disks that are alike. What we would like to do is exchange disks that are unique to their group and ours on a one for one basis. touched on. Knowledge is probably the largest reason. Seems like many folks would like to help in the group but don't have enough experience to do anything yet.

One of my responsibilities is sending our Agenda notices to the dealers and libraries in

the area. To date this has been on a full sheet of bond paper. That has changed now to take advantage of the volume discounts that Terry gets on the post cards. This coming month will be my first shot at this.

Discussion on the publication of a users directory noted that other groups are printing them for their members and possibly we should do this also. Rob noted that this could only be accomplished when the new data base was on-line. My response was that as soon as all applications, out for review by the officers, are returned data entry can be completed and this will be a reality. At that comment nearly all were returned.

The topic of NIAUG information request post cards was attended to next. It seems that a few stores in the area have handed out nearly all they had and would like us to supply them with an additional supply. The idea of mailing out packs of them to these dealers was a consideration. Due to these cards it seems that we may have an interest for an IBM SIG in the future. As soon as there are enough requests we will attempt to generate a SIG. To assist in the effort to replenish these cards Rich will pull a volunteer from his list and get that name to either Terry or Joe.

Having a demonstration of different computers besides Apple was also discussed as we have had in the past. It seems that people were interested and it would give us a chance see to what else is out there.

Joe Zeinz announced that Don L'Amoureux will be his replacement. At the meeting we sold 129 disks in total which is about 50% of normal for this time of year. The cost of Mac disks will be determined by the librarian shortly.

Shortly we will be investigating why our meeting attendance has dropped off.

Our program contest is moving along quite well and members are urged to get their programs submitted as soon as they can.

Rob mentioned that we have a volunteer to sort all the advertisement mail that is sent to the group and this information can then be passed on to the members. It is difficult to get this information to the members as it is. We are presently heading toward an independent venture with the aid of two volunteers in the direction of group bulk buys.

Why people join the group was another topic

16 bit CPU for Apple

by Randall Ansley

Over the past few months you have been hearing about a new CPU chips for the Apple. The chips that have people talking about are the 65SC802 and the 65SC816, a 16 Bit version of the 6502. The chips are being produced by Western Design Center in Arizona and should be available in a few months. If you are a developer there is a developer program available and you can call me for more information(428-5627).

The The Apple is an 8-bit computer that is to say that the only 8 bits at a time can be passed from one place to another. Think of it as a large stadium with only 8 doors, it doesn't matter how many seats you have inside, only so many people can move in and out of the doors at a time. At this time you may use the 802 in your Apple as it is an 8 bit chip. In order for you to take full advantage of the 16 bit CPU you need a 16 bit bus. Another Arizona company called Com Log is making a card that will fit into one of your Apple slots (sorry //c folks) that will turn your Apple into a 16 bit computer (sorry IBM). What does this really mean? Speed, direct addressing, and power that you will not believe.

The following information is a little technical but I hope you will find it interesting.

The W65SC802 and the W65SC816 are OXI-CMOS microprocessors featuring total software compatibility with their 8-bit NMOS and CMOS 6500-series predecessors. The W65SC802 is pin to pin compatible with 8-bit devices currently available, while the W65SC816 extends addressing to a full 16 megebytes. These devices offer the many advantages of the WDC's OXICHOS technology, including increased noise immunity, higher reliability, and greatly reduced power requirements. A software switch determines whether the processor is in the 8-bit "emulation" mode, or in the full 16-bit mode, thus allowing existing systems to use the expanded features.

65SC816

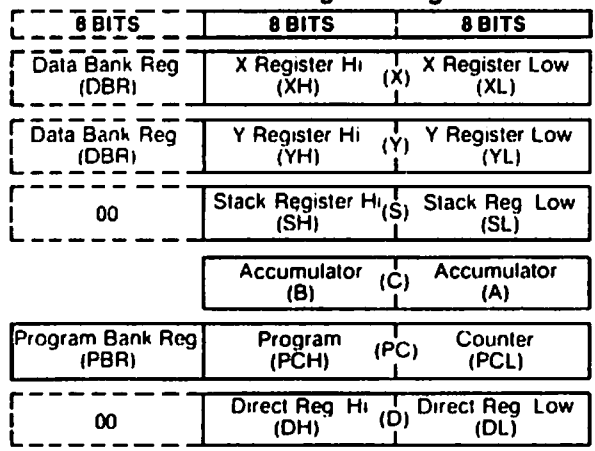
As shown in the processor programming model (Fig. 1), the Accumulator, ALU, X and Y index registers, and Stack Pointer registers have all been extended to 16 bits. A new 16-bit Direct Page register augments the Direct Page addressing mode

(formerly Zero Page Addressing). Separate Program Bank and Data Bank registers allow 24-bit memory addressing.

Four new signals provide the system designer with many options. The ABORT input can interrupt the currently executing instruction without modifying internal registers. Valid Data Address (VDA) and Valid Program Address (VPA) outputs facilitate dual cache memory by indicating whether a data segment or program segment is accessed. Modifying a vector is made easy by monitoring the vector Pull (VP) output.

The Design Engineer for the new chips is William D. Mensch Jr. one of the people that worked on the 6502. The Data in the article was provided by Western Design Center Inc. and may change in specifications before the final release.

W65SC816 Processor Programming Model



Status Register Coding

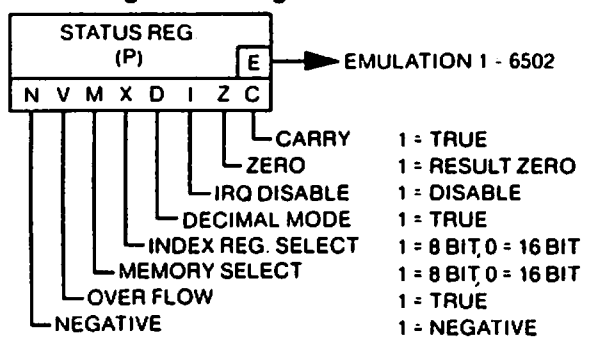


Figure 1

FEATURES-

- Advanced CMOS design for low power consumption and increased noise immunity.
- Single +5V power supply.
- Emulation mode allows complete hardware and software compatibility with NMOS 6502 code.
- 24-bit address bus allows access to 16 MByte of memory space.

- Full 16-bit ALU, Accumulator, Stack Pointer, and Index Registers.
- Valid Data Address (VDA) and Valid Program Address (VPA) output dual cache and cycle steal DMA implementation.
- Vector Pull (VP) output indicates when interrupt vectors are being addressed. May be used to implement vectors interrupt design.
- Abort (ABORT) input and associated vector supports interrupting any instruction without modifying memory or registers.
- Separate program and data bank registers allow program segmentation.
- New Direct Register allows "zero page" addressing anywhere in first 64k bytes.
- 24-addressing modes---13 original 6502 modes, plus 11 new addressing modes.
- New Wait for Interrupt (WAI) and Stop the Clock (STP) instructions further reduce power consumption, decrease interrupt latency and allows synchronization with external events.
- New Co-Processor instruction (COP) with associated vector supports co-processor configuration, i.e., floating point processors.
- New block move ability.

W65SC816 Microprocessor Op Code Matrix

		0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	
									LSD									
0		BRK s 2 8	ORA(d.x) 2 6	COP s 2*8	ORA sr 2*4	TSB d 2*5	ORA d 2 3	ASL d 2 5	ORA(dl) 2*6	PHP s 1 3	ORA imm 2 2	ASL acc 1 2	PHD s 1*4	TSB a 3*6	ORA a 3 4	ASL a 3 6	ORA al 4*5	0
1		BPL r 2 2	ORA(d.y) 2 5	ORA (d) 2*5	ORA(sr).y 2*7	TRB d 2*5	ORA d.x 2 4	ASL d.x 2 6	ORA(dl).y 2*6	CLC imp 1 2	ORA a.y 3 4	INC acc 1*2	TCS imp 1*2	TRB a 3*6	ORA a.x 3 4	ASL a.x 3 7	ORA al.x 4*5	1
2		JSR a 3 6	AND(d.x) 2 6	JSL al 4*8	AND sr 2*4	BIT d 2 3	AND d 2 3	ROL d 2 5	AND(dl) 2*6	PLP s 1 4	AND imm 2 2	ROL acc 1 2	PLD s 1*5	BIT a 3 4	AND a 3 4	ROL a 3 6	AND al 4*5	2
3		BMI r 2 2	AND(d.y) 2 5	AND(d) 2*5	AND(sr).y 2*7	BIT d.x 2*4	AND d.x 2 4	ROL d.x 2 6	AND(dl).y 2*6	SEC imp 1 2	AND a.y 3 4	DEC acc 1*2	TSC imp 1*2	BIT a.x 3*4	AND a.x 3 4	ROL a.x 3 7	AND al.x 4*5	3
4		RTI s 1 7	EOR(d.x) 2 6	WDM RESERVED	EOR sr 2*4	MVP xyc 3*7	EOR d 2 3	LSR d 2 5	EOR(dl) 2*6	PHA s 1 3	EOR imm 2 2	LSR acc 1 2	PHK s 1*3	JMP a 3 3	EOR a 3 4	LSR a 3 6	EOR al 4*5	4
5		BVC r 2 2	EOR(d.y) 2 5	EOR (d) 2*5	EOR(sr).y 2*7	MVN xyc 3*7	EOR d.x 2 4	LSR d.x 2 6	EOR(dl).y 2*6	CLI imp 1 2	EOR a.y 3 4	PHY s 1*3	TCD imp 1*2	JMP al 3*4	EOR a.x 3 4	LSR a.x 3 7	EOR al.x 4*5	5
6		RTS s 1 6	ADC(d.x) 2 6	PER s 3*6	ADC sr 2*4	STZ d 2*3	ADC d 2 3	ROR d 2 5	ADC(dl) 2*6	PLA s 1 4	ADC imm 2 2	ROR acc 1 2	RTL s 1*6	JMP (a) 3 5	ADC a 3 4	ROR a 3 6	ADC al 4*5	6
7		BVS r 2 2	ADC(d.y) 2 5	ADC(d) 2*5	ADC(sr).y 2*7	STZ d.x 2*4	ADC d.x 2 4	ROR d.x 2 6	ADC(dl).y 2*6	SEI imp 1 2	ADC a.y 3 4	PLY s 1*4	TDC imp 1*2	JMP(a.x) 3*6	ADC a.x 3 4	ROR a.x 3 7	APC al.x 4*5	7
8	MSD	BRA r 2*2	STA(d.x) 2 6	BRL rl 3*3	STA sr 2*4	STY d 2 3	STA d 2 3	STX d 2 3	STA(dl) 2*6	DEY imp 1 2	BIT imm 2*2	TXA imm 1 2	PHB s 1*3	STY a 3 4	STA a 3 4	STX a 3 6	STA al 4*5	8
9		BCC r 2 2	STA(d.y) 2 6	STA (d) 2*5	STA(sr).y 2*7	STY d.x 2 4	STA d.x 2 4	STX d.y 2 4	STA(dl).y 2*6	TYA imp 1 2	STA a.y 3 5	TXS imp 1 2	IXY imp 1*2	STZ a 3*4	STA a.x 3 5	STZ a.x 3*5	STA al.x 4*5	9
A		LDY imm 2 2	LDA(d.x) 2 6	LDX imm 2 2	LDA sr 2*4	LDY d 2 3	LDA d 2 3	LDX d 2 3	LDA(dl) 2*6	IAY imp 1 2	LDA imm 2 2	TAX imp 1 2	PLB s 1*4	LDY a 3 4	LDA a 3 4	LDX a 3 4	LDA al 4*5	A
B		BCS r 2 2	LDA(d.y) 2 5	LDA(d) 2*5	LDA(sr).y 2*7	LDY d.x 2 4	LDA d.x 2 4	LDX d.y 2 4	LDA(dl).y 2*6	CLV imp 1 2	LDA a.y 3 4	TSX imp 1 2	ITY imp 1*2	LDY a.x 3 4	LDA a.x 3 4	LDX a.y 3 4	LDA al.x 4*5	B
C		CPY imm 2 2	CMP(d.x) 2 6	REP imm 2*3	CMP sr 2*4	CPY d 2 3	CMP d 2 3	DEC d 2 5	CMP(dl) 2*6	INY imp 1 2	CMP imm 2 2	DEX imm 1 2	WAI imp 1*3	CPY a 3 4	CMP a 3 4	DEC a 3 6	CMP al 4*5	C
D		BNE r 2 2	CMP(d.y) 2 5	CMP (d) 2*5	CMP(sr).y 2*7	PEI s 2*6	CMP d.x 2 4	DEC d.x 2 6	CMP(dl).y 2*6	CLD imp 1 2	CMP a.y 3 4	PHX s 1*3	STP imp 1*3	JMI (a) 3*6	CMP a.x 3 4	DEC a.x 3 7	CMP al.x 4*5	D
E		CPX imm 2 2	SBC(d.x) 2 6	SEP imm 2*3	SBC sr 2*4	LPX d 2 3	SBC d 2 3	INC d 2 5	SBC(dl) 2 6	INX imp 1 2	SBC imm 2 2	NOP imp 1 2	XBA imp 1*3	CPX a 3 4	SBC a 3 4	INC a 3 6	SBC al 4*5	E
F		BEQ r 2 2	SBC(d.y) 2 5	SBC (d) 2*5	SBC(sr).y 2*7	PEA s 3*5	SBC d.x 2 4	INC d.x 2 6	SBC(dl).y 2*6	SED imp 1 2	SBC a.y 3 4	PLX s 1*4	XCF imp 1*2	JSR(a.x) 3*6	SBC a.x 3 4	INC a.x 3 7	SBC al.x 4*5	F

Op Code Matrix Legend

- * New W65SC816 Op Codes
- W65SC02 Op Codes

INSTRUCTION MNEMONIC	ADDRESSING MODE
BASE NO BYTES	BASE NO CYCLES
(COMMENT)	

Pin Configuration

- 2 MVP Move Block from Source (X Addressed) to Destination (Y Addressed). Block Length Defined by C. X, Y are Decremental.

J. New Co-Processor Operations (1 Op Code)

1. COP Co-Processor Instruction with Associated COP Vector and ABORT Input Supports Co-Processing Function i.e., Floating Point Processors, etc

K. New System Control Instructions (3 Op Codes)

1. STP Stop-the-clock Instruction Stops the Oscillator Input (or 02 Input) During 02 = 1. This Mode Is Released When RES Goes to a Zero. System Initialization May Be Desired; However, if After RESET One Performed an RTI, Program Execution Begins With the Instruction Following the STP Op Code in Program Sequence
2. WAI Wait for Interrupt Pulls RDY Low and Is Cleared by IRQ or NMI Active Input.
3. WDM There is One Reserved Op Code Defined as WDM Which Will Be Used For Future Systems. The W65SC816 Performs a No-Operation.

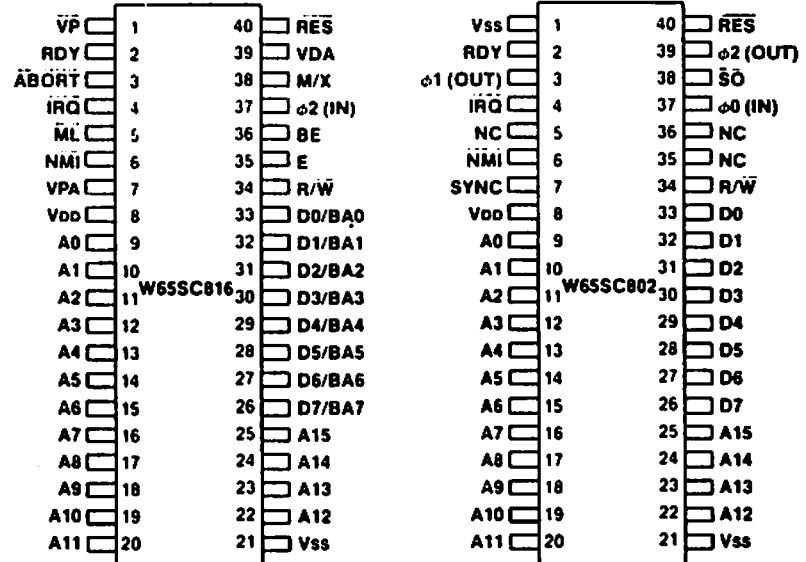


Table 3. Addressing Mode Summary

Address Mode	Instruction Times In Memory Cycles		Memory Utilization In Number of Program Sequence Bytes	
	Original 8 Bit NMOS 6502	New W65SC816	Original 8 Bit NMOS 6502	New W65SC816
1. Immediate	2	2 ⁽³⁾	2	2 ⁽³⁾
2. Absolute	4 ⁽⁵⁾	4 ^(3,5)	3	3
3. Absolute Long	—	5 ⁽³⁾	—	4
4. Direct	3 ⁽⁵⁾	3 ^(3,4,5)	2	2
5. Accumulator	2	2	1	1
6. Implied	2	2	1	1
7. Direct Indirect Indexed (IND), Y	5 ⁽¹⁾	5 ^(1,3,4)	2	2
8. Direct Indirect Indexed Long (IND), Y Long	—	6 ^(3,4)	—	2
9. Direct Indexed Indirect (IND, X)	6	6 ^(3,4)	2	2
10. Direct, X	4 ⁽⁵⁾	4 ^(3,4,5)	2	2
11. Direct, Y	4	4 ^(3,4)	2	2
12. Absolute, X	4 ^(1,5)	4 ^(1,3,5)	3	3
13. Absolute Long, X	—	5 ⁽³⁾	—	4
14. Absolute, Y	4 ⁽¹⁾	4 ^(1,3)	3	3
15. Relative	2 ^(1,2)	2 ⁽²⁾	2	2
16. Relative Long	—	3 ⁽²⁾	—	3
17. Absolute Indirect (Jump)	5	5	3	3
18. Direct Indirect	—	5 ^(3,4)	—	2
19. Direct Indirect Long	—	6 ^(3,4)	—	2
20. Absolute Indexed Indirect (Jump)	—	6	—	3
21. Stack	3-7	3-8	1-3	1-4
22. Stack Relative	—	4 ⁽³⁾	—	2
23. Stack Relative Indirect Indexed	—	7 ⁽³⁾	—	2
24. Block Move X, Y, C (Source, Destination, Block Length)	—	7	—	3

NOTES:

- Page boundary, add 1 cycle if page boundary is crossed when forming address.
- Branch taken, add 1 cycle if branch is taken.
- M = 0 or X = 0, 16 bit operation, add 1 cycle. add 1 byte for immediate.
- Direct register low (DL) not equal zero, add 1 cycle.
- Read-Modify-Write, add 2 cycles for M = 1, add 3 cycles for M = 0.

Instruction Set

W65SC816 Instructions (256 OP Codes)

A. The Original 6502 Instruction Set (151 Op Codes)

1	ADC	Add Memory to Accumulator with Carry
2	AND	"AND" Memory with Accumulator
3	ASL	Shift Left One Bit (Memory or Accumulator)
4	BCC	Branch on Carry Clear
5	BCS	Branch on Carry Set
6	BEQ	Branch on Result Zero
7	BIT	Test Bits in Memory with Accumulator
8	BMI	Branch on Result Minus
9	BNE	Branch on Result Not Zero
10	BPL	Branch on Result Plus
11	BRK	Force Break
12	BVC	Branch on Overflow Clear
13	BVS	Branch on Overflow Set
14	CLC	Clear Carry Flag
15	CLD	Clear Decimal Mode
16	CLI	Clear Interrupt Disable Bit
17	CLV	Clear Overflow Flag
18	CMP	Compare Memory and Accumulator
19	CPX	Compare Memory and Index X
20	CPY	Compare Memory and Index Y
21	DEC	Decrement Memory by One
22	DEX	Decrement Index X by One
23	DEY	Decrement Index Y by One
24	EOR	"Exclusive-or" Memory with Accumulator
25	INC	Increment Memory by One
26	INX	Increment Index X by One
27	INY	Increment Index Y by One
28	JMP	Jump to New Location
29	JSR	Jump to New Location Saving Return Address
30	LDA	Load Accumulator with Memory
31	LDX	Load Index X with Memory
32	LDY	Load Index Y with Memory
33	LSR	Shift One Bit Right (Memory or Accumulator)
34	NOP	No Operation
35	ORA	"OR" Memory with Accumulator
36	PHA	Push Accumulator on Stack
37	PHP	Push Processor Status on Stack
38	PLA	Pull Accumulator from Stack
39	PLP	Pull Processor Status from Stack
40	ROL	Rotate One Bit Left (Memory or Accumulator)
41	ROR	Rotate One Bit Right (Memory or Accumulator)
42	RTI	Return from Interrupt
43	RTS	Return from Subroutine
44	SBC	Subtract Memory from Accumulator with Borrow
45	SEC	Set Carry Flag
46	SED	Set Decimal Mode
47	SEI	Set Interrupt Disable Status
48	STA	Store Accumulator in Memory
49	STX	Store Index X in Memory
50	STY	Store Index Y in Memory
51	TAX	Transfer Accumulator to Index X
52	TAY	Transfer Accumulator to Index Y
53	TSX	Transfer Stack Pointer to Index X
54	TXA	Transfer Index X to Accumulator
55	TXS	Transfer Index X to Stack Register
56	TYA	Transfer Index Y to Accumulator

C. New W65SCXXX Addressing Modes (14 Op Codes)

2	BIT	Test Bits in Memory with Accumulator (Direct, X; Absolute, X; Immediate)
2	DEC	Decrement (Accumulator)
3	Group I	Instructions (Direct Indirect (8 Op Codes))
4	INC	Increment (Accumulator)
5	JMP	Jump to New Location (Absolute Indexed Indirect)

D. Group I Instructions with New Addressing Modes (48 Op Codes)

- Direct Indirect Long Indexed with Y (8 Op Codes)
- Direct Indirect Long (8 Op Codes)
- Absolute Long and Absolute Long Indexed with X (16 Op Codes)
- Stack Relative (8 Op Codes)
- Stack Relative Indirect Indexed Y (8 Op Codes)

1	ADC	Add Memory to Accumulator with Carry
2	AND	"AND" Memory with Accumulator
3	CMP	Compare Memory and Accumulator
4	EOR	"Exclusive-or" Memory with Accumulator
5	LDA	Load Accumulator with Memory
6	ORA	"Or" Memory with Accumulator
7	SBC	Subtract Memory from Accumulator with Borrow
8	STA	Store Accumulator in Memory

E. New Push and Pull Instructions (7 Op Codes)

1	PEA	Push Effective Absolute Address or Immediate Data Word on Stack
2	PEI	Push Effective Indirect Address or Direct Data Word on Stack
3	PER	Push Effective Program Counter Relative Indirect Address or Program Counter Relative Data Word on Stack
4	PIB	Pull Data Bank Register from Stack
5	PLD	Pull Direct Register from Stack
6	PHB	Push Data Bank Register on Stack
7	PHD	Push Direct Register on Stack
8	PHK	Push Program Bank Register on stack

F. Status Register Instructions (2 Op Codes)

1	REP	Reset Status Bits Defined by Immediate Byte 1 Reset 0 Do not change
2	SEP	Set Status Bits Defined by Immediate Byte 1 Set 0 Do not change

G. New Register Transfer Instructions (8 Op Codes)

1	TCD	Transfer C Accumulator to Direct Register D
2	TDC	Transfer Direct Register D to C Accumulator
3	TCS	Transfer C Accumulator to Stack Register
4	TSC	Transfer Stack Register to Accumulator C
5	TXY	Transfer X to Y
6	TYX	Transfer Y to X
7	XBA	Exchange B and A
8	SCE	Exchange Carry Bit C with Emulation Bit E

H. New Branch, Jump and Return Instructions (6 Op Codes)

1	BRL	Branch Relative Long Always (16 Bit Relative - 32768 to + 32767) (Addressing Mode)
2	JML	Jump Indirect Long
3	JMP	Jump Absolute Long
4	JSL	Jump to Subroutine Long (Uses RTL for Return)
5	JSR	Jump to Subroutine (Indexed Indirect)
6	RTL	Return from Subroutine Long

I. New Block Move Instructions (2 Op Codes)

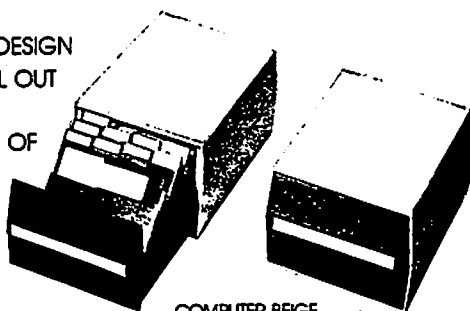
1	MVN	Move Block from Source (X Addressed) to Destination (Y Addressed), Block Length Defined by C, X, Y are Incremented.
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B. New W65SCXXX Instructions (13 Op Codes)

1	BRA	Branch Relative always
2	PLX	Pull X from Stack
3	PLY	Pull Y from Stack
4	PHX	Push X on Stack
5	PHY	Push Y on Stack
6	STZ	Store Zero in Memory (Direct, Direct, X, Abs, Abs, X)
7	TRB	Test and Reset Memory Bits Determined by Accumulator A (Direct and Absolute)
8	TSB	Test and Set Memory Bits Determined by Accumulator A (Direct and Absolute)

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SIG NEWS

BUSINESS SIG

Meets on the fourth Saturday of every month at 10:00 am at:

Mount Prospect Public Library
10 South Emerson Street
Mount Prospect, Illinois

(One block east of the intersection of Elmhurst Road (rte. 83) and Central Road).

The Business SIG will meet Nov 24. Jim Howe will present Mouse Paint, and Bill Braunis will present PFS Report, The Bridge and Visicalc.

The following months meeting will be Dec 22. Jack Gratz will present Fontrix. Please note that this meeting is tentative and may be rescheduled at the November meeting. For additional information call Beldon Rich 272-8236.

LIBRARY SIG

Meets on the first Thursday of the month at 7:30 p.m.

Call Joe Zeinz at 312/526-0575 for additional information.

MACINTOSH SIG

For information on the Macintosh SIG call Alan George 541-7819

EDUCATION SIG

The Education SIG will not meet again until the new year. Any one wishing to join this group or help determine its direction is requested to call Ann Baldrige 893-5468.

BEGINNERS SIG

The SIG continues to have two beginners' groups meeting. It is oriented towards helping "new" or "rusty" Apple users deal with the many questions, frustrations, confusions and "mistakes" that we all have made "in the beginning".

Attendees provide the direction for the meetings by the questions they ask and the topics they bring up. Experienced NIAUG members are the answerers and explainers.

NIAUG members wishing to join the SIG should call Guy Lyle at 312/359-1458.

NOTE: NIAUG membership is required.

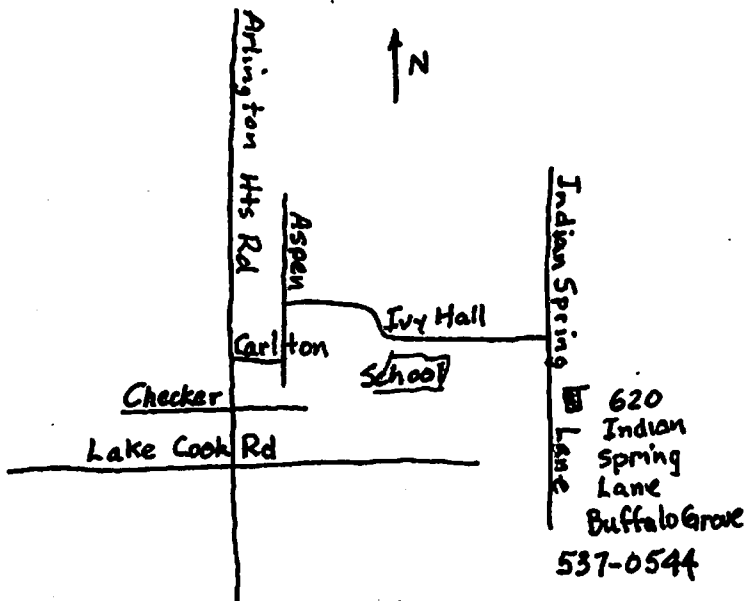
ASSEMBLY LANGUAGE SIG

The Assembly SIG is reorganizing into 2 or more separate groups. The Beginners SIG will meet next on Nov 27. Any one wishing additional information can call Helen Tufts 392-7735.

The member survey is being evaluated and a meeting will be scheduled to discuss the results and make additional plans for those who wish to be part of an Advanced Assembly group or Hardware SIG.

GRAPHICS SIG?????

People wishing to form a Graphics SIG are asked to call Raymond Oviyach, 312-560-0715.

NIAUG PLANNING MEETINGCLUB NEWS**NORTHERN ILLINOIS APPLE USERS GROUP****DECEMBER AGENDA****DEC 8, 1984.**DEC's Meeting will
be held in Bldg A
Harper College

- 10:00-10:30 am Opening Remarks/Club
Business
(Rob Stewart)
- 10:30-11:15 am Program Contest Prize
Presentations
(Joe Zeinz)
- 11:15-11:45 am MAC Topics
Wordprocessing/spread
sheets/graphics combined
(Mac SIG)
- 11:45-12:00 pm Break
- 12:00-12:45 pm Games
(Jim Glore)
- 12:45- 1:00 pm Elections/Mr. Apple
Closing Remarks
(Guy Lyle)

January's meeting date is not known at
this time

ADVERTISING

All members of NIAUG may advertise free of charge, in the form of unclassified ads, as long as the ad is not part of a commercial endeavor.

NIAUG Members may also advertise commercial ventures using an unclassified ad 1/2 page wide format at \$3/issue/five line increment or use the regular box ads at the commercial rates.

COMMERCIAL ADVERTISING-

All ads must be prepaid and camera ready to the prescribed size as follows:

- Full page -7 1/2" wide X 10" high= \$55/issue
 Half page -3 1/2" wide X 10" high= \$30/issue
 Half page -7 1/2" wide X 4 3/4" high=\$30/issue
 Quarter page-3 1/2" wide X 4 3/4" high=\$16/issue
 Eighth page -3 1/2" wide X 2 1/4" high=\$9/issue

All ads must be received by the copy deadline
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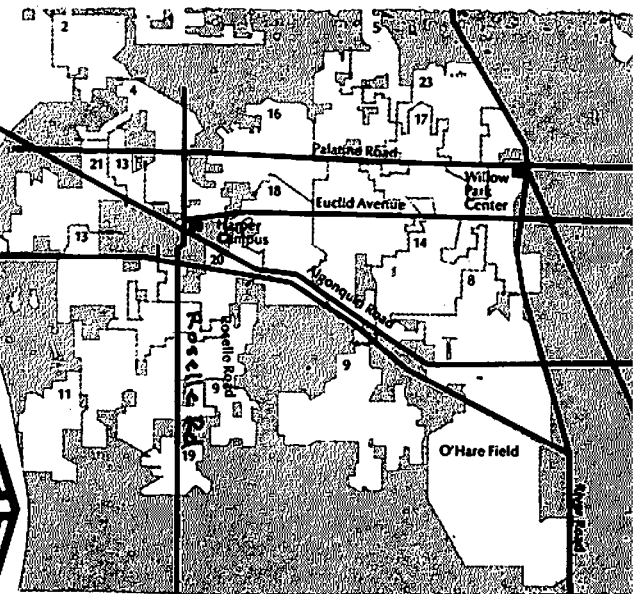
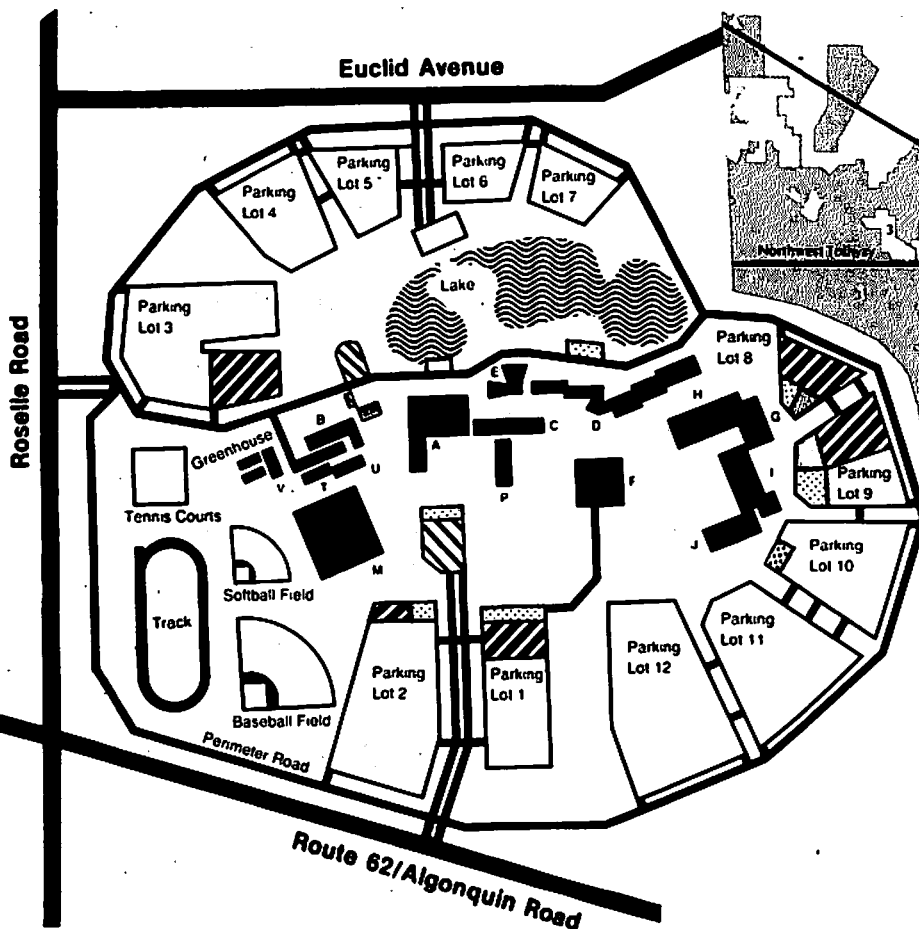
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MEETINGS

Meetings are regularly held on the the second Saturday of each month unless otherwise noted in room E106 Harper College, Palatine, IL starting at 10:00am.